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REPORT RESUMES

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LEISURE-TIME ACTIVITY-INTERESTS OF TEENAGE YOUTH IN THE WASHINGTON METROPOLITAN AREA.
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THE LEISURE ACTIVITIES OF YOUTH WERE INVENTORIED IN AN EFFORT TO DETERMINE HOW GOALS AND VALUES WERE FORMED AND CHOICES MADE REGARDING LEISURE ACTIVITIES. THE OBJECTIVES WERE TO ASSEMBLE DATA CONCERNING LEISURE ACTIVITIES OF YOUTH AND TO ASCERTAIN ACTIVITIES AND INTERESTS. A BRIEF QUESTIONNAIRE ON LEISURE ACTIVITIES WAS ADMINISTERED TO NEARLY ALL STUDENTS IN GRADES 8 THROUGH 12. EACH YOUTH WAS ASKED TO FILL OUT A ONE-PAGE DATA SHEET CALLING FOR INFORMATION ON AREA RESIDENCE, AGE, SEX, GRADE LEVEL, CULTURAL LEVEL OF PARENTS, EDUCATION PLANS, USE OF CAR, SPENDING MONEY AVAILABLE PER WEEK, SOCIAL PARTICIPATION, AND SCHOOL STANDING. FROM THESE DATA, BASIC TABULATIONS WERE MADE FOR ABOUT 27 TYPES OF AREAS BASED UPON SOCIOECONOMIC STATUS, DEGREE OF URBANIZATION, AND ADEQUACY OF LEISURE-TIME FACILITIES. THE FINDINGS WERE VALIDATED BY A POST-STUDY INTERVIEW OF 300 OF THE YOUTHS. THE DESCRIPTIVE ANALYSIS OF RECREATIONAL ACTIVITY-INTERESTS IN TEENAGERS HAS INDICATED THAT SEX, AGE, PLACE OF RESIDENCE, SOCIOECONOMIC STATUS, AND RESIDENTIAL DENSITY ALL CONTRIBUTE TO THE VARIATION IN THE RELATIVE FREQUENCY OF A TYPOLOGY OF YOUTH. NO EVALUATIONS OF ANY TYPE OF YOUTH--OUTDOOR, INTELLECTUAL, PASSIVE, DATING, OR ALTRUISTIC--ACCORDING TO DESIRABILITY HAVE BEEN MADE, NOR DOES THE AUTHOR INTEND THAT ANY SUCH EVALUATION BE INFERRED AT THIS STAGE OF THE RESEARCH. BASIC TABLES FOR THIS STUDY ARE IN PART 2, ED 002 930. (JL)

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LEISURE TIME ACTIVITY-INTERESTS OF TEEN-AGE YOUTH IN THE WASHINGTON METROPOLITAN AREA

A Research Study Conducted in

The Department of Sociology, University of Maryland

with the cooperation of

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Pursuant to a Contract with the United States Office of Education,

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LEISURE TIME ACTIVITY-INTERESTS IN TEEN-AGE YOUTH IN THE WASHINGTON METROPOLITAN REGION

A. INTRODUCTION TO THE PROBLEM

This is a study of the recreational interests of high school students in the Washington, D. C., Metropolitan Region in which the public school systems of Prince Georges County, Montgomery County, Maryland, Fairfax County, Arlington County, Alexandria, Falls Church, Virginia and the school system of Washington, D. C., are situated. In addition, a small sample of Catholic schools is also included although the major inquiries concern the students in the public high school systems of the Metropolitan Region. A ninth school system is that of Flint, Michigan, a small industrial city in Michigan. An important goal of the study is to produce data which can be of service to school systems, planners, those interested in leisure time activities, social service workers and social science researchers. Working hypotheses are that such factors as age, sex, socio-economic status, and population density within ecological units of the region are determinants of differences in recreational ("spare time") activities engaged in and preferred by high school youth. An empirical, but common-sense, classification of youth by their recreational activity interests has been made so that we can find statistical measurements of Outdoor, Intellectual, Passive, Altruistic and Dating youth.

The universe of study consists of all high school students in the Metropolitan region who were able to take the test. All public high schools and some private high schools in the region participated. Cooperation of the school systems was remarkably facile and was in the main effected through the aid of Dr. Edward B. Olds, Program Development Consultant of the Health and Welfare Council of Washington, D. C.

The use of leisure time reveals styles of life and fundamental conceptions of the self. A most common classification of leisure time activities by Americans is that the interests of the public can be classified simply into those that are spectator interests, those that are strictly commercially supplied activities and, thirdly, those which are craftsmanlike interests. The latter are referred to generally as "hobbies" although any type of activity interest may be a hobby. It is true that the spectator interests and the craftsmanlike interests of the public are commercially supplied, but they need not necessarily be. Estimates of how much money is spent for particular activities, of course, will not reveal the degree of interest in activities which are essentially spectator or craftsmanlike activity-interests. The approach in this report is that of classifying complexes of activity-interests in types of youth rather than classifying activities. Any activity can supply a number of needs to a number of people. The meaning or evaluation of an activity to one individual is not the same meaning necessarily that that activity has to another individual.

Two essential facts need to be recognized when we deal with uses of free time or "spare time". The decline of the length of the working day and the increased enforced "retirement" of persons of later maturity make it imperative that we distinguish between unemployed time and spare time or free time. So-called free time or spare time is time that has been paid for in the past by the time that has been spent in working. Thus, a child who "works" at school or an adult who is employed is rewarded with free time which, using the wording of our questionnaire, is "the time in which you are free to do what you want to do rather than what you must do. It is the time when you are not working for pay, going to school, doing homework, or travelling to and from work or school." An unemployed adult has no free time since it is assumed that his "free time" is unwillingly coerced; if the free time is a reward for work done in the past, such time is truly leisure--it is free from work. The problem of a minority of persons who were formerly called the leisure classes is essentially the same problem of the coerced "free time" that the unemployed have. Very little is known of the meaning of enforced free time in people of means. It is generally observed that these find some charitable employment (without financial remuneration) or engage in some public service with some token remuneration. The term "leisure classes" has very little meaning in America today now that leisure time pursuits have been democratized.

In the unemployed who seek employment with pay, the meaning of such enforced leisure in the adult is not known except as given in descriptive analysis. Spare time (the very term implies a secondary position of recreation to work rather than an equality of importance) is certainly not regarded by the unemployed worker as a reward. It is probable that the free time of people of large means when it is protracted over long periods of time may be, in the case of the wife or children of a wealthy man (but not the retired), regarded by them as a reward for either work done by themselves or by their ancestors.

The free time of the retired person of later maturity may be coerced, yet this free time is regarded as an earned reward for labor done. In like manner, the increasing length of vacations for working adults is reflected in the activity-interests of high school adolescents who accompany their parents on extended trips. The expenditures for tourist travel and the wilderness complex of activities (camping, fishing and hunting in togetherness) will exceed that of any other leisure time activity. In the study of a recreational plan for a city, distinctions need to be made between the leisure time activity-interest needs of

1. the retired person
2. the semi-retired person, such as the widow or unmarried person living in comfortable means but not employed for gain
3. the unemployed of any age who have a desire to be employed
4. the vast body of adults in the height of their family life
5. adolescents of high school age
6. special groups such as the handicapped, ill, or very young.

Since the pattern of use of leisure is indicative of a style of life, evaluations of specific activities are most commonly made within the good-bad dichotomy. The usual criticisms of other people's leisure activities are that the activities are an escape from work or that they are not refreshing enough so that production and efficiency upon return to work is maximized, or that the activity is bad for the individual, the family, the community, or "society". The source of the prohibition, discouragement, toleration or encouragement of specific leisure time activity differs in adolescence from age group to age group, and between socio-economic strata. Furthermore, such evaluations of activities will differ among types of youth across strata lines. If we can assume that choices made by our respondents are indicative of "good" and "bad" activity-interests, the appetition for specific forms of recreation will be either prohibited, or discouraged, or tolerated, or encouraged by segments of the youth population. While some activities that we ask questions about may be immoral to some (e.g., dancing, riding in cars unchaperoned, movies, etc.), none are illegal. Evaluators of leisure time pursuits make specious categories of sports, games of skill, hobbies and mass entertainment and invidiously relegate the latter to inferior status on some implied value hierarchy. Still others, just as invidiously, put at the top of their public value hierarchy the notion of re-creating oneself through study or through an aesthetic interest; here aesthetic interests are "good for you" but may not be an integral part of the personality.

Whether we regard leisure as the reward for work and the reason for working or if we regard work and leisure as of equal significance in our daily life, it is possible to begin to lay down the criteria for evaluating "good" use of free time. Some researchers, however, would also insist that a set of criteria for evaluating the search for criteria is also necessary. Max Kaplan in his book Leisure in America: A Social Inquiry[1] has made such a search for criteria of "good" leisure. He writes[2] that "good" leisure:

1. affords a sense of belonging to the participants
2. cultivates the unique or "different" in the participant
3. is an activity which can have more than one purpose or function (our respondents were asked to show activities most like the things they usually did to meet new people, just be with your friends, be with a person of the opposite sex or get to meet and know such persons, feel rhythm or beat, to rest, relax, take it easy, or be comfortable, be amused or entertained. One of two dozen responses offered was, for instance, this: attend church, Sunday school or other religious activities.)
4. can be, if need be, useful to others
5. has no "bad" consequences to the self or others and engenders minimal intra and interpersonal conflicts. Bad is here interpreted to mean disappointing to some group.
6. affords creativity which is expressive of the self and which is usually aesthetic.

It is possible that that leisure time pursuit which engenders the least amount of conflict is best. A test for these six criteria would be the examination of sets of available leisure time pursuits which are available in a community and which are freely rejected in favor of activities which do satisfy these six criteria.

The social philosophy of leisure which needs to be objectively studied by social scientists is pithily summarized in the following aphorism: do we play in order to work better or do we work in order to play? This, of course, is a variant of do we live to eat, or do we eat in order to live. The social scientist should deal with this philosophical "ought". A good beginning would be to find out what is in order to determine what ought to be. The scientist should study the relative proportions of adults who see work as a means to produce an end-product--namely, the free use of spare time according to the dictates of the self. This must differ among socio-economic strata and among residents of central city, suburbia and rururbia and on the farm. Communities certainly differ in this respect.

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1. Max Kaplan, Leisure in America: A Social Inquiry, (John Wiley & Co., 1960)
2. Op. Cit., page 27

In this questionnaire seventy-eight questions are asked. Most of these are followed by a list of leisure time activities which serve to refresh the memory of the respondent. The first five questions, for instance, deal with the interest in an activity at a specified level of participation which pre-testing determined was modal. While anyone could have played chess once in a year, this would have not indicated an interest in chess. The modal time spent by persons playing chess on our pre-tests was about twelve hours in a year.

The questions asked concerned the following areas of inquiry:

1. Activities done in your spare time three or more hours during the past year.
2. Activities done in your spare time 12 or more hours during the past year.
3. Activities done in your spare time eight or more hours per month on the average during the past year (or a total of over 100 hours per year).
4. Activities done in your spare time four or more hours per week on the average during the past year (that is, more than 16 hours per month or over 200 hours per year).
5. "Now go back ... show what you would like to do most or do more often in your spare time--if nothing prevented you." (Twenty are chosen from the above list of 77 activities which are most commonly done by youth.)
6. The motives or benefits which "young people often receive from their use of spare time."
7. Educational plans for the future, type of course now taking, and the parents' schooling.
8. Parents' voluntary associations.
9. Socio-economic status of father's employment.
10. Two methods to measure the socio-economic status of respondents' aspirations for employment in adulthood.

Thirty-nine yes-no questions concerning:

11. School grades.

12. Family composition.

13. Living standards in the home: family car use, telephone, television, air-conditioning, a room of one's own, recreation room, dishwasher, home ownership, mobility of the family, mother's employment, magazines and books in the home, use of library, summer camp, musical attainments, students' summer and year-round employment.

14. Physical handicaps.

15. Respondent's fun with the family group.

16. Respondent's club activity, and circle of friends.

17. Pocket money.

18. The size of the acquaintance group.
    How often meet with the acquaintance group.
    Kinds of volunteer activities done.
    Kinds of volunteer activities would like to do.
    Kinds of groups belonged to.
    How many groups belonged to.
    How many athletic groups belonged to.

19. Questions concerning resources:
    Amount of spending money.
    Use of spending money for other purposes than recreation.
    Amount of money used for recreation.
    Manner of transportation used by student to get to place of recreation.
    What activities should be "free"?
    How spending money would be spent if freedom of choice were given: "If you had $300 to spend..."
    Kinds of places (institutional buildings) to "which you went more than five times during the past year..."
    Special types of instruction received.
    What improvements in the community are most needed.

20. Questions concerning mobility as a recreation interest:
    Types of leisure-travel made and what kinds of trips are desired more.
    With whom did the respondent go on trips.

Specifically, where the respondent went on trips.
Where would the respondent like to go on trips.

21. Questions concerning the benefit received from activities:
    Motives (21 benefits) given for engaging in leisure time activities.
    Twenty-one sets of activities for which each has a specific motive-benefit.
    A typology of persons who pick particular complexes of benefits received from leisure-time.
    The relationship between what is desired and what is done specifically for a particular benefit.

22. Estimates of the specific number of hours engaged in specific activities.

23. The number of activities engaged in.

24. The choice of activities the respondent would like to do.

25. The measurement of appetition for specific activities (the like-do ratio).

The appendix[1] has a complete set of the questions arranged in a logical manner. Physically, the questions were segregated into sixteen separate four-page special booklets and one eight-page booklet. Each respondent answered only one of the special booklets, but all respondents answered the eight-page booklet. The sample of boys and girls answering each special booklet is only one-sixteenth as large as that for the entire universe of cases, which includes 62,958 boys and girls in the ninth-twelfth grade, 4,995 seventh and eighth graders from a ten percent sample of junior high schools in the region, 1,111 girls from some Catholic high schools in the region, 214 boys from a private preparatory school in the region, and 4,213 boys and girls in tenth to twelfth grades in Flint, Michigan. The questionnaire was 72 printed pages long. Analysis during the next year by the present writer will reduce the questionnaire to 12 pages.

These 25 areas of inquiry are asked in the context of age, sex, socio-economic status, an activity-interest typology of youth, and four ecological variables: (a) census tract, (b) school-system jurisdiction (Washington, D.C.; Montgomery and Prince Georges Counties in Maryland; Arlington County, Alexandria, Falls Church, and Fairfax County in Virginia; and Flint,

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[1] Appendix A

Michigan), (c) thirty-seven density-areas each spatially non-contiguous and representing amount of living space available for recreation, and (d) three density-regions, non-contiguous areas having similar amounts of living or green space available.[1]

The production of a table which separates the sources of variation which affect appetition for specific activity-interests is the main objective of the statistical work yet to be done. This table was prepared by the Datatrol Corporation of Silver Spring, Maryland, who scored and prepared fundamental tables for about one-fourth of the total monies allotted to this project.

Datatrol Corporation prepared and ran two computer programs to produce the final tabulation. The process was divided into two phases[2] to give statistical control over the tabulated results. The first program was run on the Univac Solid State 80, and the second on the IBM 704.

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[1] Region I having 70 or more persons per "available" accessible acre of land; Region II having from 10 to 69.9 persons per "green" acre; and Region III having less than 10 persons per "green space" acre. This is roughly comparable to Central City, Suburbia, and Open Country.

[2] The first phase computed activity-interest, socio-economic, and personality type scores for each school child. These scores for each individual were punched back on the same individual binary data cards provided Datatrol by the University of Maryland. The dominant personality score of each child was determined and marked on the data card. Frequency distributions of socio-economic scores and activity-interest scores for each of nine activity-interest types were computed and printed. These distributions were used to set thresholds for classification of individuals in the second phase. The data cards punched with the scores by phase one were sorted by population density and geographical area and loaded onto magnetic tape for input to phase two. Within each geographical and density area the second program classified and tabulated activities and activity-interests of individuals according to age, sex, activity-interest type and socio-economic status. Frequency distributions, means and quartiles were computed for socio-economic and activity scores. In addition, 16 special questionnaires were tabulated. All these tabulations were written out on magnetic tape and printed in a form suitable for photographic reproduction.

Solution of the practical problem of scoring about 73,000 cards for 22 scores and counting over 2,000 binary entries within 324 subgroups within the limited budget was effected by the knowledgeable work-team in the Datatrol Corporation. The present author wishes to express his gratitude to Hugh P. Donaghue, John A. Lamkin, and Franz M. Burkholder, all members of the Datatrol Corporation, whose help was efficient, quick and, above all, brilliantly economical.

The complete set of 220 pages of Table One are microfilmed and deposited at the University of Maryland. The analysis of this table and other tables constructed from summary cards will take the better part of a year, since responsibility for this rests now in the present writer's hands. Non-parametric statistical tests for significance are to be used,in particular the Wald-Wolfowitz two sample runs test and the Wilcoxon match-pair ranked signs test. The specific tasks to be yet done are here discussed:

1. While data was being collected, immediate steps had to be instituted to edit the data since experience with porto-punch IBM cards was limited and difficulties concerning the mechanical manipulation of the cards had to be solved. The routing and collecting of data took five months and no complete universe of cases or a representative sample of the universe was possible until August 1, 1960, three months before the official tenure of the project was ended. It was, however, necessary to work on the specifications for electronic computing equipment, namely the 604 and the 704. Estimates on the cost of the use of these electronic computing machines varied greatly. In fact, the estimates from two eminent companies was greater than the entire sum of money allotted to this project. The writer of this report solved the practical problem, in the face of constant machine failures, of making three master decks of data. A total of 312,000 cards were processed before the three master decks were in shape for the better conventional scale-making procedures. The best procedure would have been to wait until all data was in, edited, and initially processed into a master deck. This was not accomplished until August 1, 1960. With a complete universe, a representative sample could have been taken from it and the procedures which are to be reported later in this report used on the representative sample. This would give little time for the writing of the specifications for the electronic computers. Instead, the first five thousand edited cases were used,which we know is not representative of the entire universe of cases. Consequently, some of the procedures for establishing the activity-interest types of youth need to be replicated from a representative, purposive sample from the universe.

2. Statistical significance tests need to be done to prove that the types exist and that the activity items are correct ones for the types. The sources of variance for each of the 22 scales need to be appraised and the questionnaire shortened.

3. Analysis of the effects of basic variables upon the incidences of the various types of youth is to be done by the present writer in the immediate future.

4. Norms for scores need to be erected so that communities can compare each other and use what they wish for planning purposes.

5. Interpretation of the data to supply answers to common stereotyped public generalizations concerning leisure time activities of youth and the "good life" for youth.

6. The effect of socio-economic status on leisure use is centrally important as the planes of living vary greatly within a community as well as between communities. A high plane of living means that the chances of staying alive is greatest, that living qualitatively well as far as maintenance of the body is concerned is highest, that illness is not only prevented but easiest to cure, that freedom or the invitation to make choices is greatest, that influence upon others is greatest and that leisure is most abundant in quality as well as in quantity among one stratum and not another.

The bulk of the questionnaires were administered during March, April, and May of 1960. Generally teachers were taught to administer the questionnaire and usually had at least one hour instruction in how to administer it. In addition, most schools had at least one faculty meeting in their school in which problems were discussed. Generally, a special coordinator for the school was appointed by the principal who helped in the training of the teachers. Principals and coordinators met earlier to be orientated by a School System Representative appointed by each of the superintendents of the seven major school systems which participated in the study. A sixteen-page manual was available to be read and used by each teacher.

One of the unique features of the study was the inexpensive manner of transferring information from the questionnaire to specially-designed IBM cards which were punched by the student himself with a specially-designed plastic stylus employed on an adhesive spongy plastic pad. Some twenty to thirty thousand dollars of expense in keypunching and verifying was saved using these devices.

Students made use of sets of large wall maps specially designed for determination and coding of the census tract in which they resided. There were also copies of census tract street indexes furnished them for this purpose.

Large visual aid charts were given to teachers to help them to understand the procedures of answering the questionnaires and of punching the IBM cards. Each student had two cards to deal with.

As the pads and styluses were expensive, they had to be used repeatedly; this required that careful scheduling of materials had to be done so that on any particular day, the materials were available for particular schools. This coordination of the routing of the materials was largely done by the Program Development Staff at the Health and Welfare Council of Washington, D. C.

Each response to a question was coded on the questionnaire with a number and letter which corresponded to a position on the card which was to be punched. Codes to responses were first circled by the student on the questionnaire before he punched the responses on the IBM cards. Name, address, and census tract address codes were written on the name card. Age, sex and grade level were also punched by the student into this card. The school number and an arbitrary file number were pre-punched into the name card. All the remainder of the responses to questions were punched into a yellow porto-punch card. This procedure in itself is a major contribution to research methodology, since the cost of developing the instruments collecting data and analyzing them is less than $.47 per case. There are in all provisions for answers to 2,192 separate (binary) questions asked in the questionnaire for which machine tabulations have been made. In addition, there are about 120 separate holes allotted in the IBM cards for identification purposes so that each card can be uniquely identified. The methodology used here made it possible to develop, collect and analyze 44 specific pieces of binary information (in 44 holes) per penny of total costs. This analysis included the production of 22 scored scales, their medians and distributions.

Information on the yellow card was then transferred by a 604 Electronic Calculator to a white card. A total of over 152,000 cards were thus handled and dealt with by the students and eventually by the 604 Electronic Calculator. On the 604 Electronic Calculator a master deck was made, so designed to store all information including name, address, and census tract.[1] Census tract determinations were checked for accuracy when suspect. The name card as it now exists contains all information except derived scores of scales.

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[1] All questionnaires were edited and checked for errors and corrected where possible. The author wishes to acknowledge the superb supervision of detailed routines worked out by Mrs. Sara Lee Hornbeck, who is chiefly responsible for the large task of visually editing more than 73,000 questionnaires.

B. ECOLOGICAL MEASUREMENTS

An important variable that is considered in this study is that of the density of population in small ecological units. The most common manner of measuring density is to divide the number of the total population of all ages within a unit such as a census tract or community area by the number of square miles or acres within the unit. In this study, available land such as open-country areas, parklands, and areas developed for specific recreational use is differentiated from unaccessible land such as governmental reservations, and installations not available to all the public. The unaccessible acreage was not included in the computation of density in this study.

A computation of population density was made for each of the three hundred and thirty-five census tracts in the Washington Standard Metropolitan Area. This was done by computing the total number of people of all ages per "available" acre of residential undeveloped open-country, undeveloped wooded areas, parkland and recreational space. This may be referred to as a living space density and is intended to reflect or indicate the number of people who have an acre of "green" space available to them for other than work-purposes, that is, recreational or leisure-time purposes.

For Virginia and Maryland, 1959 data was used; for the District of Columbia, 1957 data.*

Participants in this leisure time study are viewed as residents of census tracts of either high (seventy or more persons per acre), middle (ten to 69.9 persons per acre), or low (less than ten persons per acre) "living space" density. Residents who live in a high density region are regarded as living in a region which is deficient in the amount of "green" space available to it. The population or "living space" figures by census tracts is given in Appendix B.

It is assumed in this study that one of the values of city dwellers is to aspire to have as much living space (in particular, green parkland and wooded areas) as possible. This is an attainable goal for all.

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* The author wishes to acknowledge the assistance of Joseph R. Marches, who made the computations and helped develop the planning of suitable density measures. The basic source for acreage and population data was taken from reports by the various planning agencies in the Washington area. These are: The National Capital Planning Commission, The Northern Virginia Planning Commission, and The Maryland National Park and Planning Commission.

High density regions (which presumably have a minimum of trees and grass within them) will be designated as being of Density Region I. Low density regions (which presumably have a maximum of trees and grass within them) will be designated as being of Density Region III.

Clusters of contiguous census tracts with similar green space densities are designated as Density-Areas. A number of Density-Areas make up a Density Region. There are three Density Regions: I, II, III (not necessarily contiguous). However, there are 37 Density-Areas considered in this study--some small and some very large in population. Small suburbs of Washington are likely to be in Density Region II, while open country areas are likely to be in Density Region III.

Washington, D. C., has all three Density Regions; Montgomery County, Prince Georges County in Maryland, and Alexandria and Arlington and Fairfax Counties in Virginia are split into two parts, Density Region II or Density Region III. Falls Church is in Density Region II.

In summation, the following ecological space considerations are made:

A. Jurisdiction: Washington, D. C.

Jurisdiction: Maryland (a) Montgomery County
(b) Prince Georges County

Jurisdiction: Virginia (a) Alexandria
(b) Arlington and Falls Church
(c) Fairfax County

B. Density Region: I (High); II (Middle); III (Low)

C. Density-Area: Thirty-seven areas.

These measurements will make it possible to contrast suburban and open-country recreation with urban recreation all within the Greater Metropolitan Area, which includes part of two states and all of the District of Columbia. It must be recalled that the heart of D. C., which includes its most crowded sections, has not only crowded slum dwellers but also middle class apartment dwellers. It will be possible to compare Washingtonians who have the most "green" space available to them living in Density Region III with Washingtonians living in Density Region I who have the least green space available to them.

Evidence will be marshalled to enlighten the assumption that "good living" can best be attained in Density-Areas which have an urban character to them.

The percentage distribution of the total population of the Greater Metropolitan Area is estimated to be as follows in the thirty-seven Density-Areas of the seven school jurisdictions which were studied.

Table A

Percentage Distribution of Population by Living Space Density Classification for Component Parts of the Washington, D.C., Standard Metropolitan Area

		Components of the Washington, D.C., Standard Metropolitan Area						
Living Space Density Region Classification		D.C.	Arlington Co. Va.	Fairfax Co. Va.	Montgomery Co. Md.	Prince Georges Co., Md.	Alexandria Va.	Falls Church, Va.
High (Index: 70+ persons per acre) 403,062 pop.	100%	48% 100%						
Medium (Index: 10-69.9 persons per acre) 844,757 pop.	100%	43% 42%	88% 18%	12% 3%	52% 14%	51% 14%	77% 8%	100% 1%
Low (Index: less than 10 persons per acre) 538,457 pop.	100%	9% 13%	12% 4%	88% 38%	48% 20%	49% 21%	23% 4%	
		100%	100%	100%	100%	100%	100%	100%

Total Population is 1,786,276*

***This figure does not include census tracts for which population figures were not available (census tracts 1,2,3,4,5,6,7,8,9,10,11,12A and 12B in Montgomery County, Md., and census tracts 1,2,3,5,6,7,8,9, 10,11,12,13, and 14 in Prince Georges County, Md.)**

The distribution of cases within the thirty-seven Density-Areas is given in Table B. These are for 9 - 12th graders only.

Table B
Density-Areas in Seven Jurisdictions (School Systems) of the Metropolitan Washington, D.C., Region with the Number of Cases in Each

Living Space Density Region Classification		Components of the Washington, D.C., Standard Metropolitan Area							Total Metropolitan Region
		Washington, D. C.	Arlington Co., Va.	Fairfax Co. Va.	Montgomery Co. Md.	Prince Georges Co., Md.	Alexandria Va.	Falls Church Va.	
High (Index: 70+ persons per acre) 403,062 pop.	100%	#21, #22 N=6,813							
Medium (Index: 10-69.9 persons per acre) 844,757 pop.	100%	#23-27 N=8,013	#91, #92 N=5,464	#61 N=867	#41 thru #47 N=5,754	#71 thru #78 N=5,271	#12 thru #14 N=543	#31 N=493	
Low (Index: less than 10 persons per acre) 538,457 pop.	100%	#20, #28, #29 N=1,624	#93 N=852	#62 N=10,263	#48 N=8,146	#79 N=8,284	#11 N=571		
Total		16,450 Cases	6,316 Cases	11,130 Cases	13,900 Cases	13,555 Cases	1,114 Cases	493 Cases	62,958 Cases

Of these 62,958 cases, two and four-tenths percent were rejected as faulty after machine editing. The distribution of these rejections was as follows:

Washington, D.C.,	717 rejected out of 16,450, or 4.36%
Virginia,	280 rejected out of 19,053, or 1.47%
Prince Georges County,	365 rejected out of 13,555, or 2.69%
Montgomery County,	161 rejected out of 13,900, or 1.16%
	1,523 rejected out of 62,958, or 2.42%

The rejection rate was a function of the type of supervision given by principals and others interested in the administration of the questionnaire.

Data is rejected if any four of the following conditions in the data obtain:

There are three locations in the questionnaire involving 18 holes in the IBM card in which no question was asked at all. If a response is there, where none is asked, this is evidence of either machine fault (jarring loose a hole in the porto-punch card) or respondent error.

Fourth, the respondent did not answer adequately the question concerning which occupations he believes he most likely will be doing when he is 30 years of age, etc.

Fifth, the respondent was asked to pick twenty activities which he would like to do more or more often. If he picked more than twenty-three or less than eight, the data is suspect.

Sixth, if the respondent chose less than three or more than eight benefits, the data is suspect.

Seventh, if the respondent did not answer the question concerning the usual method of travel to get to spare time activities, the data is suspect.

C. MEASUREMENT OF THE APPETITION FOR SPECIFIC LEISURE TIME ACTIVITIES AND THE PROBLEM OF THE "MOTIVES BEHIND" SUCH APPETITION: A TYPOLOGY OF LEISURE-TIME ACTIVITY-INTERESTS IN HIGH SCHOOL YOUTH

Although the length of the work week has decreased and made more free time available to parents which can be spent with their children, and although there is a rising real income and the ability to pay for leisure time pursuits, it is not at all clear that the ability to pay for leisure will be associated with a demand for particular leisure time pursuits. The social-psychological interest in this appetition in adolescents for particular leisure time pursuits is studied with the use of the like-do ratio. The like-do ratio is affected by other considerations than ability to pay, amount of free time, or the opportunities and facilities available.

According to a study made by Fortune[1], the percent of income spent on all leisure items is not a straight line function of income group. The computed rank correlation for eight income groups with percent of income spent for leisure is only .48. Other considerations than income influence the appetition for particular activity-interests. The benefits alleged to be received by a particular activity is a social-psychological variable of great interest in making specific differentiations among youth as to what activities are in latent demand. The like-do ratio is computed in the following manner:

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[1] Editors of Fortune, "The Changing American Market", Chapter X

If F_j is a count of a particular activity participated in and F_i is a count of a particular activity desired, then $\sum_{j=1}^{n} F_j$ is equal to the sum of the activities participated in and $\sum_{i=1}^{77} F_i$ is equal to the summation of activities desired. The like-do ratio is equal to $\frac{F_i}{\sum F_i} \div \frac{F_j}{\sum F_j}$.

Like-do ratios are computed for 77 activities. They are done for specific groupings of youth. An example of such a grouping would be boys under 16 years of age, living in a high density area, having high socio-economic status who have the complex of Outdoor Activity-Interests.

The like-to-do interest in an activity such as tennis for such boys can be compared, for instance, with the like-to-do interest in Outdoor type boys under 16 years of age, living in a low density area and also having high socio-economic status.

Choice of items and use of a classification of "motives" for engaging in specific kinds of recreation:

Many items used in the present questionnaire were tested and pre-tested five or six times by Dr. Edward B. Olds of the staff of the Health and Welfare Council of Washington, D. C. Of great interest was the attempt to get as complete a spectrum of leisure time activities of youth as possible. If an activity was not mentioned by write-ins to open-ended questions at least once in a total of over a thousand cases in the pre-tests and earlier versions of the questionnaire, such an activity was considered as exceedingly rare, idiosyncratic, or covert. There is, therefore, some justification to believe that a very wide spectrum of youth activities were tapped through the use of such open-ended questions as: what do you do for recreation if you want to use your mind; or, what do you do for recreation if you want to get to meet new people, etc.

A collection of motives of "basic drives" was gathered from Guilford's, et al.,"A Factor Analysis Study of Human Interests"[1] and Sheldon's Varieties of Delinquent Youth[2] and from previous versions of the present test instruments.

A list of useful motives to behavior was made from these sources. Some of these are logically deduced from the factors that Guilford discovered in his analysis of the interests of 13 flights of male basic airmen in 1951. A total of 600 airmen and 720 officers were used in this analysis.

The list should be read as a compendium of "reasons" youth may give for their interest in particular recreational pursuits. Although the list is too long for practical use with youth because too fine social-psychological distinctions are made which are not always conscious to a youngster, we were able to reduce the list to 21 "motives". In the questionnaire these are called benefits to the self--they "do you some good" since they supply a deeply felt need. The list in its entirety included the following:

1. Interest in travel for diversion, new experience, seeing new places.
   Exploration of dangerous situations in which no other human being is involved except as an on-looker.
   Do something which is adventurous, courageous or daring in front of other people who know me.

2. Do something to be comfortable, rested or relaxed.

3. Do something so that the larger muscles of my body are exercised.
   Interest in walking: movement of legs.
   See some action and not just sit.
   Interest in being in the open air.
   Interest in playing outside in the open air.

4. Physical drive without slowing down from other persons.

5. Interest in movement on a living animal.

6. Interest in movement on water or in water.

7. Interest in movement by means of some motor device.

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[1] J. P. Guilford et al.,Air Research and Development Command Human Resources Research Center, A Factor Analysis Study of Human Interests, Research Bulletin 53-11.

[2] W. Sheldon's Varieties of Delinquent Youth (Harper, 1949).

8. Interest in movement on inanimate objects.

9. Find a place to holler and make noise.

10. Do something so that I'm with my family or brothers and sisters.

11. Be with a small bunch of people I know.

12. Be away from people.

13. Initiating friendly contacts with people (sociability); meeting new people.

14. Interest in learning about people and persuading them in collectivities.

15. Interest in being seen by others as an orderly, neat person.

16. Persuading people in groups in order to get approval from them.
Interest in being the cynosure of a group's attention; having prestige; being sought out.
Receiving esteem from others who know me; being deferred to.
Do something that a lot of people who know me will approve of.
Do something so that a lot of people will like me.

17. Aggression toward other persons directly in face-to-face interactions.
Aggression toward other persons indirectly in non-face-to-face interactions.
Aggression toward non-human objects.
Interest in meeting people in commercial transactions.
Laugh at somebody from a safe distance, especially through humor by making fun of him.
Hit somebody, interest in dominating somebody.

18. Do something to outwit somebody.
Compete to try to win or "score".
Use my brains.

19. Artistic appreciation or expression.
Creating or composing music.
Expressive passivity.
Aesthetic expression.

20. Do something in which people can find out what I believe or feel inside.

21. Humanitarian, altruistic interests, helping others or helping the community.

22. Precision with material objects.
Precision with physical objects; making something with my hands that is exactly right.

23. Tendency to like abstractions concerning non-human objects.
Scientific interest in learning abstractions concerning non-human objects.

24. Enlarging the self by learning to relate the present achievements of mankind to its past achievements so that the individual is for long periods of time self-reliant.

25. Independence and confidence in the self's adequacy.

26. Independent, non-restricting personal habits.
Conservative conformism; used to doing the popular, the expected.
Playful diversion from everyday routine.

The motives or benefits "behind" such activities as the return to the wilderness complex, or the performance of an artistic act, or expressive passivity (enjoying nature, just loafing) were more difficult to discern and express in simple language for high school students. However, questions concerning these activities are included, if not the motivation behind them.

A possibly fruitful sociological classification of games which may reveal light on the problem of why one specific leisure-time activity satisfies one need for one particular person while in another person the same activity satisfies another need is the following:

1. The organized high-level energy game which is a melee with constant readjustment to a gestalt of more than two persons.

2. The game which is a concerted highly organized readjustment to a gestalt of more than two persons but without a melee.

3. Games in which turns are taken but there is no intermittent wait between performances. The activity is constant and only two persons are needed to perform.

4. Games in which there is parallel play. Each takes a turn and waits for his turn while the other person performs singly. There is intermittent easygoing play with only two persons needed to perform.

5. Pain "sports" which are usually in a special place or room taking turns; some pain or extreme discomfort is inevitable and generally only two persons are needed to perform.

The preference patterns for these five types of games by various kinds of youth need to be explored. Games are sports which have rules, some institutional provision for interpretation of the rules, and procedures to make decisions to declare in a competition who is a winner and who is a loser.

It would be best to reserve the term sport (sociologically) to activities where competition, rules, interpretation of rules, declaration of a winner, and awareness of a contest is absent. A game cannot be played alone, but a sport can be. Theoretically, any sport in the present context of definition can become a game. Not every game can become a sport. It is impossible to play in a baseball game alone, without rules, arbiters, winners, competition. Fishing or hunting are sports; they could become competitive games with rules, etc. Not all games are physical; some are sedentary and involve a play of wit rather than muscle.

Preference or appetition toward activities imply a value system. Preference for one of the above five types of games (a typology of sports in the present sense has not been constructed) could be studied by ascertaining whether the preferred behavior-value is (1) ideally preferred with anticipation but observed in reality as an activity to be shunned; (2) or whether the preferred value is coerced by others or by circumstances beyond one's control. Charles Morris in his book Varieties of Human Behavior[1] indicates that there are three aspects of valued behavior to be studied. They are:

1. Simple preferences of one activity to another.

2. Preferences expressed in symbols in which what ought to be is not identical with what actually is. Here symbolic expression of valued activities may be at variance with the actual behavior observed. The behavior may be enjoyed but its symbolic expression may be abhorred. And, again, the behavior may be abhorred but its symbolic expression may be enjoyed.

3. Activities which are preferred but not for their own sake. Here, coercions upon the valuer may be removed and what was once preferred may be avoided.

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[1] Charles Morris, Varieties of Human Behavior (University of Chicago Press, 1956), Chapter 1.

The instructions to our respondents to choose activities which they would like to do more often in their spare time--"if nothing prevented you"--is designed to study the third aspect of valued behavior which Morris distinguishes. The first aspect is studied by asking respondents to tell what activities they did do. The second aspect of valued behavior is more subtle to study. We are able to study this in this research by making a comparison between (1) the complex of benefits that a respondent is asked to choose ("Read over this list of benefits which young people often receive from their use of spare time. Circle six codes to show which benefits are most important to you."), (2) the choice of activities he engages in, and (3) would prefer to do more of. An Outdoor Type of boy (that is, a boy whose complex of recreational benefits is that of a person who likes to be outdoors) may very well have activity-interests and appetitions disparately other than those that are intellectual.

Morris studied three determinants of preferential behavior and values: the cultural, the social (that pertaining to the interactions of the group), and the biological (that is, body type). From an examination of world philosophies he posits 13 "paths" or ways to live which are valued in the world philosophies he has examined. They are:

1. Preserve the best man has attained.
2. Cultivate independence from persons and things.
3. Show sympathetic concern for others.
4. Experience festivity and solitude in alternation.
5. Act and enjoy life through group participation.
6. Constantly master changing conditions.
7. Integrate action, enjoyment, and contemplation.
8. Live with wholesome carefree enjoyment.
9. Control the self stoically.
10. Meditate on the inner contemplative existence.
11. Chance adventuresome deeds.
12. Obey the cosmic purposes.
13. Passively receive unsought for mystical experiences.

Through discussion of the list of motives and perusal of these 13 "paths" of life, a reduced list of 21 benefits applicable to young high school students was made. The question asked was:

> Read over this list of BENEFITS which young people often receive from their use of SPARE TIME. Circle 6 CODES to show which BENEFITS are most important to you.
>
> Get physical Exercise
> Meet new people
> Broaden my outlook on life
> Get Self-Confidence
> Have Adventure, excitement or risk
> Design or Make Something which is beautiful or useful
> Be Outdoors
> Help a particular person, family, group or community
> Do Something New and Different
> Feel Rhythm or beat
> Be Amused or entertained
> Just Be With my friends
> Get Away From People and have some peace and quiet
> Find out What To Believe, what's the right way to live or how to behave towards others
> Get Knowledge or use my mind
> Do something which will make Others Like Me or admire me
> Just Be With My Family (parents, brothers and sisters)
> Do something Competitive or challenging
> Rest, relax, take it easy, or be comfortable
> Develop New Skills and abilities
> Be with a person of the opposite sex or get to meet and know such persons

The responses to this question were analyzed first. Of the first 5,000 edited cards[1], those who followed instructions to pick only six benefits and those who picked five or seven were analyzed and the remainder excluded from the analysis.[2] A table was constructed to get the relationship of frequencies of all benefits to each other. Only one-half of the matrix was used, since one-half of it is a mirror image of the other half. The form of the table was as follows:

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[1] Called Work Deck A

[2] A second sample collected later of 5,000 from which a controlled purposive sub-sample of 1,200 cases were picked revealed the following distribution of benefits picked: none - 5; two benefits - 2; three benefits - 7; four - 20; five - 74; six - 699; seven - 326; eight - 29; and nine or more - 33. Ninety-one and eight-tenths picked five, six or seven benefits; about five percent picked eight or more; and three percent picked less than five benefits. It is apparent that use of the benefits alone is an unreliable procedure to classify these youth.

	Benefits Chosen							Total Frequency	Total Percent
Benefits Chosen	1	2	3	4	5	6	et cetera 21		
1		D						B	
2									
3									
4									
5									
6									
'									
'									
,									
21									
Total Frequency									
Percent		A							100%

The statistical procedure for Chi Square was to multiply A by B. Call this C. C was subtracted from D to give the difference between the theoretical and the actually observed. This difference was squared and divided by the theoretical (C). A second table was constructed giving the signs of significant Chi Squares at the .05 level of significance. All non-significant Chi Square values were noted with their signs and the fact that they were non-significant. With scissors and paste a matrix was constructed so that the clusters of signs were segregated. Clusters or complexes of benefits were made by counting the number of plus relationships in a set of benefits that visually by inspection appeared to go together. Arbitrarily, the benefits which had the largest number of plus relationships were put into a cluster. There was constant readjustment of benefits within a tentative cluster until the greatest number of plus relationships was counted.

Rules were constructed so that determination of a youth as to predominant cluster of benefits could be made. These rules were constructed so that not only the number of benefits were taken into account but ties in the number of benefits in two clusters that an individual card had were avoided. For further study, a random sample of 150 persons[1] of each type of benefit cluster was selected. There were, after age, socio-economic status and ecological area lived in were statistically controlled by matching:

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[1] From the first entire Work Deck A of 5,000 cases.

150 Outdoor Boys
150 Intellectual Boys
150 Passive Boys
150 Indeterminate Boys
150 Outdoor Girls
150 Intellectual Girls
150 Dating Girls
150 Altruistic Girls
150 Indeterminate Girls

Evidence that these clusters of benefits are adequate for their intended function was gotten by constructing a work table so that the choices as to activities and interests of the nine types could be compared. Here is part of the table for boys based on the first 5,000 Work Deck A.

Activity	150 Outdoor Boys	150 Intellectual Boys	150 Passive Boys	150 Indeterminate Boys
Softball	113*	90	102	96
Regular Exercise	72*	55	65	44
Hiking	45*	40	43	28
Motor Boating	41*	26	21	30
Fishing	66*	54	65	46
Chess	26	30*	16	30
Read	41	55*	42	34
Plays	15	29*	21	14
Play Major Sports	98*	79	95	76
Attend Church	98*	77	91	60
Belong Athletic Clubs	40*	32	32	18
Watch TV	121	110	125*	128

The starred frequencies are candidates for a score. They are starred if: there is a 15 point spread between the highest and the lowest in a row. Fifteen points is equal to a 10 percent difference. Thus, for softball there is a 23 point spread between the so-called intellectual boy and the outdoor boy; this is equivalent to 23/150 or 15.3% difference in softball playing between the intellectual boy and the outdoor boy.

The present specifications collects all these starred items into one score for an activity-interest score. No statistical significance of proportions work has been done on this material, as it is well known that the size of the error is dependent on the size of N, the number of cases. Since in our universe such an N can reach more than 32,000, and since the scores had to be ready before all the data were collected in order to get bids for the complicated machine work necessary to analyze the data, any size difference could have been proved to be statistically significant with such a large N. While our Work Deck A is not a representative sample of any part of our universe, it was safe to begin with the concept of ordinal measurement within a context of intervalic measurement of an unknown accidental sample. All error or bias due to accidental bad sampling can be corrected when the evidence from the complete universe of cases is presented in tabular form. The typology of benefit-profile is as follows:

Typology of Benefits-Profiles

Dating Girl

The dating girl is so classified if she chooses three or more of the following benefits she reports she receives from the use of her spare time:

1. She gets physical exercise.
2. She meets new people.
3. She feels rhythm or beat.
4. She gets to be with a person of the opposite sex or gets to meet and know such persons.

Altruistic Girl

The altruistic girl is so classified if she chooses three or more of the following benefits she reports she receives from the use of her spare time:

1. She has adventure, excitement or risk.
2. She gets to design or make something which is beautiful or useful.
3. She gets to help a particular person, family, group or community.
4. She gets to do something new or different.
5. She gets to do something which will make others like or admire her.

Intellectual Girl

The intellectual girl is so classified if she chooses three or more of the following benefits:

1. She broadens her outlook on life.
2. She finds out what to believe, what's the right way to live, or how to behave towards others.
3. She gets knowledge or use of her mind.

Outdoor Girl

The outdoor girl must choose four of the following benefits:

1. She gets to be outdoors.
2. She gets to be with her friends.
3. She gets to rest, relax, take it easy, or be comfortable.
4. She develops new skills and abilities.
5. She is amused or entertained.
6. She gets to be with her family.

Outdoor Boy

The outdoor boy must choose three of the following benefits:

1. He gets physical exercise.
2. He has adventure, excitement or risk.
3. He gets to be outdoors.
4. He gets to be with his friends.
5. He develops new skills and abilities.

Intellectual Boy

The intellectual boy must choose four of the following benefits:

1. He meets new people.
2. He broadens his outlook on life.
3. He gets self-confidence.
4. He finds out what to believe, what's the right way to live, or how to behave towards others.
5. He gets knowledge or use of his mind.
6. He does something competitive or challenging.

Passive Boy

The passive boy chooses two of the following benefits:

1. He is amused or entertained.
2. He gets away from people and has some peace and quiet.
3. He rests, relaxes, takes it easy, or is comfortable.

If more than fifty percent of a particular complex of benefits is chosen by a student, he is classified under that Benefit-Pattern. It is possible that a student who picks six benefits will pick two benefits which classify her as one of the Intellectual Benefit type, she may also choose four benefits which classify her as one having an Altruistic Benefit Pattern. However, if a student followed instructions and picked six and only six benefits, the following multiple classifications are possible but not necessarily probable:

1. Dating Girl Benefit Pattern and also Altruistic;
2. Dating Girl Benefit Pattern and also Intellectual;
3. Altruistic Girl Benefit Pattern and also Intellectual;
4. Intellectual Girl Benefit Pattern and also Outdoor;
5. Outdoor Boy Benefit Pattern and also Passive Boy Pattern.

It is regrettable that neither a creative type nor a conventional type of boy or girl was found in our Work Deck A. The conventional girls and boys like to do what they are used to doing, or what adults expect them to do or what is merely popular.

A third piece of evidence that the common sense typology we use is reliable as well as informative as to what are the needs of youth in their leisure time activities is the index of preference computed for 294 boys and 418 girls who were typed. These were in 9th - 12th grades and had picked the required number of benefits, six. Table C presents these indices and Table D presents the percent of youth who chose each benefit.

Table C

The index of preference is derived as follows:

1. Tabulate the number of youth in each type preferring each benefit.
2. Compute the percent of youth in each type preferring each benefit.
3. Tabulate the number and percent of all youth preferring each benefit.
4. Compute the ratio of each individual percentage to the base (the percent of all youth preferring each benefit).
5. An index number of over 1.00 indicates that that particular benefit is overly represented in that type.

The Index of Preference for Leisure Time Benefits

The index for 185 Dating Girls

	Dating	Outdoor	Altruistic	Intellectual	Indeterminate
Physical exercise	1.72	.52	.95	.92	.65
Meet people	1.14	.92	.98	.81	1.01
Feel rhythm	2.86	.00	.35	.13	.50
Be with opposite sex	1.76	.79	.47	.46	.92
Average	1.87	.55	.69	.58	.77

The index for 22 Outdoor Girls

	Dating	Outdoor	Altruistic	Intellectual	Indeterminate
Be outdoors	.97	2.98	.52	.53	1.18
Be with friends	.97	1.49	.57	.74	1.18
Rest and relax	1.27	4.66	.13	.34	1.03
Develop skills	.56	1.18	.77	1.35	1.12
Be amused	.93	2.42	.26	.66	1.23
Be with family	.70	2.48	.23	.78	1.32
Average	.90	2.52	.41	.73	1.18

The index for 56 Altruistic Girls

Get adventure	1.12	.81	2.93	.35	.91
Do something useful	.78	.22	3.60	.31	1.06
Do something new	.69	.50	1.79	.69	1.24
Help others	.66	.53	2.57	1.14	.89
Average	.81	.52	2.72	.62	1.02

The index for 155 Intellectual Girls

Broaden outlook	.61	.31	.79	2.76	.66
Find what to believe	.74	.43	.30	2.19	.74
Get knowledge	.59	.28	.24	2.86	.52
Average	.65	.34	.44	2.60	.64

The index for 154 Outdoor Boys

	Outdoor	Passive	Intellectual	Indeterminate
Physical exercise	1.14	.94	.79	.98
Get adventure	1.90	.92	.22	.58
Be outdoors	2.05	.62	.10	.60
Be with friends	1.87	.75	.30	.63
Develop new skills	1.26	.34	.91	1.05
Average	1.84	.71	.46	.77

The index for 78 Passive Boys

Be amused	.61	3.86	.32	.54
Get away from people	.68	3.54	.92	.43
Rest and relax	.65	4.68	.08	.32
Average	.65	4.03	.44	.43

The index for 62 Intellectual Boys

	Outdoor	Passive	Intellectual	Indeterminate
Meet new people	.79	.59	1.11	1.26
Broaden outlook	.60	.79	2.79	.82
Get self-confidence	.49	.42	1.27	1.50
Find what to believe	.56	.52	2.58	1.01
Get knowledge	.58	.63	2.17	1.08
Do something competitive	.99	.61	1.09	1.11
Average	.67	.59	1.85	1.13

Table D

Percent Distribution of 21 Benefits from Recreation Among Nine Types of Youth in a Preliminary Sample of 750 Girls and 525 Boys

Girls

Item	Altruistic	Dating	Intellectual	Outdoor	Indeterminate	Total
Physical exercise	4%	13%	6%	6%	5%	7%
Meet new people	12%	15%	10%	9%	15%	12%
Broaden outlook	2%	2%	10%	3%	4%	4%
Get self-confidence	2%	4%	6%	3%	6%	4%
Have adventure	8%	3%	1%	3%	2%	3%
Design something	8%	2%	1%	2%	2%	3%
Be outdoors	2%	4%	2%	9%	5%	5%
Be amused	1%	3%	2%	7%	3%	3%
Be with friends	3%	4%	3%	9%	4%	5%
Get away from people	1%	1%	2%	2%	1%	1%
Find what to believe	2%	3%	10%	3%	5%	5%
Get knowledge	1%	2%	14%	3%	3%	5%
Be liked	12%	4%	2%	3%	6%	5%
Be with family	1%	1%	2%	5%	2%	2%
Do something competitive	3%	2%	2%	2%	3%	2%
Rest and relax	1%	2%	1%	5%	1%	2%
Feel rhythm	2%	7%	1%	2%	1%	2%
Do something new	14%	5%	5%	5%	11%	8%
Help others	10%	3%	6%	3%	4%	5%
Be with opposite sex	6%	16%	5%	7%	9%	8%
Develop new skills	5%	4%	10%	9%	8%	7%
Total Benefits	912	903	909	1061	861	4646

Boys

Item	Outdoor	Intellec-tual	Passive	Indeter-minate	Total
Physical exercise	14%	9%	8%	12%	11%
Meet new people	7%	11%	5%	9%	8%
Broaden outlook	3%	9%	3%	3%	4%
Get self-confidence	3%	6%	2%	9%	5%
Have adventure	8%	2%	4%	3%	4%
Design something	2%	1%	2%	2%	2%
Be outdoors	11%	2%	3%	3%	5%
Be amused	2%	2%	12%	1%	4%
Be with friends	9%	1%	4%	4%	5%
Get away from people	1%	1%	10%	2%	3%
Find what to believe	2%	9%	2%	4%	4%
Get knowledge	4%	12%	3%	5%	6%
Be liked	3%	4%	3%	5%	3%
Be with family	3%	1%	1%	3%	2%
Do something competitive	4%	8%	2%	2%	4%
Rest and relax	2%	1%	14%	1%	4%
Feel rhythm	2%	1%	4%	3%	2%
Do something new	5%	3%	4%	6%	5%
Help others	1%	2%	1%	4%	2%
Be with opposite sex	7%	7%	9%	11%	9%
Develop new skills	10%	8%	3%	8%	7%
Total Benefits	989	938	886	846	3659

A sample of 650 girls and 525 boys was picked later from a second Work Deck of 5,000 cases from areas in all seven school jurisdictions, which included both upper class as well as lower class neighborhoods. If we use the complex of benefits which are "boy" benefits which the Outdoor Boy indicates are reasons for engaging in his particular leisure time pursuits, and apply them to the girls, we find that 8.5% of the girls could be classified as girls who have the Outdoor Boy benefit-motivations that boys have. Similarly, 6.5% of the girls have the "Passive Boy" benefit-complex that boys have; 4.9% of the girls would have the benefit-complex of Intellectual Boys. Using the benefit-complexes of the boys on the girls, 80% of the girls would be classified as Indeterminate, or untyped.

If we use the complex of benefits which are "girl" benefits associated with the Dating Girl type and apply them to the boys, we find that 23.4% of the boys could be classified as boys who have the benefit-motivation of Dating Girls; the figure for the girl Outdoor type is only 2%; for the Altruistic, 1.5%; however, for the Intellectual this figure is 22.3%; remainder (50.7%) would be classified as Indeterminate or untyped.

Based on non-representative samples there seem to be seven clusters of benefit-complexes in our youth. According to a preliminary report at hand now based on 31,770 girls and 29,623 boys in the 9th to 12th grades and 4,715 boys and girls in 7th and 8th grades in the Metropolitan area; and an additional 4,162 boys and girls in the 10th to 12th grades in Flint, Michigan, the distribution of activity-interest types is as follows:

Washington Metropolitan Region

	7th & 8th Graders	9th-12th Graders
Outdoor Boys	51.0%	46.0%
Outdoor Girls	37.4	31.8
Intellectual Boys	2.0	4.5
Intellectual Girls	12.2	21.1
Passive Boys	22.3	23.4
Indeterminate Boys	24.7	26.1
Indeterminate Girls	30.6	23.8
Dating Girls	9.2	13.3
Altruistic Girls	10.6	10.0

Flint, Michigan

	10th - 12th Graders
Outdoor Boys	50.1%
Outdoor Girls	33.8
Intellectual Boys	2.1
Intellectual Girls	18.8
Passive Boys	24.5
Indeterminate Boys	23.4
Indeterminate Girls	24.5
Dating Girls	12.4
Altruistic Girls	10.5

Appendix C has a breakdown of these figures by socio-economic status. In addition, Appendix C gives comparable percentages for: 1,084 high school girls from Catholic schools, and 186 boys from a private preparatory boys school. These are in the Washington Metropolitan area. The junior high sample is said to be a sample of about one-tenth of the total number of junior high schools in the area. The Catholic sample is of undetermined composition since not all Catholic schools were able to cooperate in the study. These figures are based on machine edited cases in which all data which did not meet certain standards of quality control were rejected. The classification of a youth depended on the following criteria:

(1) The individual boy's score for Outdoor, Intellectual or Passive was above the median for all boys.

(2) If there were more than one score above the median, the highest score was the determinant of the classification.

(3) All those boys who were below the median in all three activity-interest scores (Outdoor, Intellectual or Passive) were placed in the Indeterminate group.

(4) It will be necessary to study how many girls classified as Intellectual because their activity-interests are above the average have, for instance, Altruistic activity-interests also above the average.

D. ITEMS CHOSEN FOR SEVEN ACTIVITY-INTEREST SCORES

1. There are 48 items that the "Dating Girl" chooses most frequently. The median number of items chosen by all girls in 9th - 12th grade was 18.06 in the Metropolitan Region.

The Dating Girl takes regular exercises; plays volley ball, soccer, or field hockey; goes bicycling; gives parties for friends, goes to picnics; goes walking in parks, woods, along trails, etc.; goes swimming; plays musical instruments; reads interesting and worthwhile books; rides around in cars for fun rather than to get somewhere; goes to meetings of clubs and organizations; watches movies (elsewhere than on TV); plays a major sport, such as baseball, basketball, football or track; goes dancing; goes out on dates; just rests and relaxes or does nothing; listens to popular music on radio, phonograph, or tape; watches TV.

She would like to go for rides on excursion boats or short boat cruises; to play badminton; to take part in cheer leading or baton twirling; to go bowling; to play miniature golf; to go on camping trips for overnight or longer; to go fishing or hunting; to go drag strip racing, motorcycle or car racing; to go roller or ice skating at rinks; to go motorboating (inboard or outboard); to cook or bake something special; to give parties for friends; to go to picnics; to go walking in parks, woods, along trails, etc.; to ride around in cars for fun rather than to get somewhere; to go to parties, "pot-lucks", socials, hayrides, etc.; to watch sports events (other than on TV or in movies); to go out on dates; to talk and joke with friends and acquaintances; to listen to popular music on radio, phonograph, or tape.

She went more than five times during the past year for spare time activities to a recreation center or community center operated by a public or governmental agency and to a dance hall or ball room (commercial).

She belonged to the student council or student government at school; to the school newspaper, magazine or annual; to an athletic or sports club other than a team; and to a sorority or exclusive social club. She also belonged to one or two athletic or sports teams.

She usually goes on out-of-town trips with friends of her own age. Her family subscribes to three or more weekly or monthly magazines. There are more than 50 books in her home.

2. There are 40 items that the "Outdoor Girl" chooses most frequently. The median for all girls in the Metropolitan Region was 16.7.

The Outdoor Girl goes for rides on excursion boats or short boat cruises; plays softball; plays volley ball, soccer or field hockey; plays badminton; goes bowling; plays ping pong or table tennis; plays tennis; goes roller or ice skating at rinks; goes to picnics; goes swimming; rides around in cars for fun rather than to get somewhere; watches movies (other than on TV); plays games such as cards, checkers, dominoes, etc.; goes dancing; just rests and relaxes or does nothing.

She wants to go horseback riding; to go skiing on snow; to go water skiing or aquaplaning; to go on outings to amusement parks; to play softball; to go bowling; to go on camping trips for overnight or longer; to go fishing or hunting; to go on picnics; to ride around in cars for fun rather than to get somewhere; to go to meetings of clubs and organizations; to go to parties, "potlucks", socials, hayrides, etc.; to watch movies (other than on TV); to watch sports events (other than on TV or in movies); to go out on dates; to talk and joke with friends and acquaintances; to just rest and relax or do nothing; to watch TV.

She went more than five times during the past year for spare time activities to a recreation center or community center operated by a public or governmental agency and to a country club. She belongs to one or two groups. There are more than 50 books in her home. She prefers to have fun with her family rather than with her friends. There are four or more young people in her circle of friends with whom she has fun about once a month or oftener.

3. There are 44 items that the "Intellectual Girl" chooses most frequently. The median for all was 14.7.

The Intellectual Girl goes for rides on excursion boats or short boat cruises; volunteers to paint, type, etc., for a church or club; goes to classical concerts or recitals; plays volley ball, soccer or field hockey; goes bowling; sings in a chorus, choir, glee club, etc.; takes part in a hobby such as photography, radio or fixing up TV's, hi-fi's, rockets, telescopes, etc.; browses around in libraries or bookstores; goes to plays; plays musical instruments; reads interesting and worthwhile books; goes to meetings of clubs and organizations; does homework or study for school courses (outside of school); reads for fun or to pass the time away.

She wants to help with a children's group or to help teach them; to volunteer to serve as a nurse's or hospital aide; to visit art galleries, museums, planetariums, etc.; to go sightseeing or visit historical places; to sing in a chorus, choir, glee club, etc.; to browse around in libraries or bookstores; to write plays, poems, stories, etc. (not school work); to take part in discussion groups with special leaders on civic affairs, careers, health, etc.; to learn foreign languages (outside of school); to go to plays (legitimate theater); to play musical instruments; to travel widely in the U.S.A. or in foreign countries; read interesting and worthwhile books; to do homework or study for school courses (outside of school); to read for fun or to pass the time away.

She has gone more than five times during the past year for spare time activities to a public school (after school); a church or synagogue (for other than religious activities); and to a country club.

She belonged to a church youth group such as a teen club, Temple Youth, CYO, Youth Fellowship; to a school science, mathematics, language, or literary club; to the school newspaper, magazine or annual. She belonged to three to five groups.

She usually goes on out-of-town trips with her family (parents, brothers or sisters) and other adults to whom not related.

Her family subscribes to three or more weekly or monthly magazines. She has borrowed more than 10 books from a public library during the past year. She can play the piano. She is an officer or committee chairman of a club or group. There are more than four people in her circle of friends with whom she has fun about once a month or oftener.

4. There were 18 items that the "Altruistic Girl" chooses most frequently. The median for all girls was 6.0.

The Altruistic Girl volunteers to paint, type, etc., for a church or club; collects money, or sells something for a good cause; helps with a children's group or helps teach them; volunteers to serve as a nurse's or hospital aide; designs something such as a dress, model plane, car, etc.; cooks or bakes something special; sews, knits, etc.; goes to picnics; plays games such as cards, checkers, dominoes, etc.; goes dancing.

She wants to help with a children's group or help teach them; to volunteer to serve as a nurse's or hospital aide; to go fishing or hunting; to go on short trips in a car; to design something such as a dress, model plane, car, etc.; to cook or bake something special; to learn foreign languages (outside of school); to go to picnics; and to go to parties, "pot-lucks", socials, hayrides, etc.

She belongs to the student council or student government at school and to the school newspaper, magazine or annual.

5. The median score for all boys, 9th - 12th grade, in the Metropolitan area was 15.33. The "Outdoor Boy" is more likely to choose from the following 39 responses:

Go exploring.
Take regular exercises or lift weights.
Play softball.
Go hiking out in the open for a half day or more.
Go bicycling.
Go motorboating (inboard or outboard).
Go on camping trips overnight or longer.
Go fishing or hunting.
Build, repair or maintain boats or cars.
Go to picnics.
Go walking in parks, woods, along trails, etc.
Go swimming.
Watch movies (other than on TV).
Watch sports events (other than on TV or movies).
Play major sports such as baseball, basketball, football or track.
Go dancing.
Go out on dates.
Attend church, Sunday school or other religious activities.

Want to go on rides on excursion boats.
Want to go horseback riding.
Want to go water skiing or aquaplaning.
Want to go sightseeing or visit historical places.
Want to take regular exercises or lift weights.
Want to play volley ball, soccer or field hockey.
Want to go on camping trips for overnight or longer.
Want to go hiking out in the open for a half day or more.
Want to go drag strip racing, motorcycle or car racing.
Want to go canoeing or boating (without motor or sail).
Want to build, repair or maintain cars or boats.
Want to play major sports such as baseball, basketball, football or track.

Belonged to from 3 to 5 groups during the past year.
Belonged to from 3 to 5 athletic or sports teams.
Belonged to church youth group such as teen club, Temple Youth, CYO, youth fellowship (not Sunday school classes or groups with a religious purpose primarily).
Belonged to athletic or sports club other than team.
Usually go on out-of-town trips with other adults to whom not related.
Most of the time prefer to have fun (movies, trips, picnics, swimming, etc.) with family rather than with friends.

Have more than four young people in circle of friends with whom they have fun about once a month or oftener.
Get together with friends oftener than twice a month to talk, listen to records, radio, TV or do other things together for fun.

6. The median number of intellectual items chosen by all boys is 14.73. The "Intellectual Boy" is likely to choose more often from the following 53 responses:

Volunteers to paint, type, etc., for a church or club.
Collects money, or sells something for a good cause.
Goes sightseeing or visits historical places.
Goes to classical concerts or recitals.
Plays volley ball, soccer or field hockey.
Plays miniature golf.
Cooks or bakes something special.
Browses around in libraries or bookstores.
Takes part in discussion groups with special leaders on civic affairs, careers, health, etc.
Works puzzles.
Goes to plays (legitimate theater).
Plays chess.
Reads interesting and worthwhile books.
Goes to meetings of clubs and organizations.
Goes to parties, "pot-lucks", socials, hayrides, etc.
Attends church, Sunday school, or other religious activites.
Does homework or study for school courses (outside of school).
Goes dancing.
Goes out on dates.
Has fun with family (parents, brother or sister).
Reads for fun or to pass the time away.

Wants to go sightseeing or visit historical places.
Wants to go to classical concerts or recitals.
Wants to help with a children's group or help teach them.
Wants to volunteer to serve as a nurse's or hospital aide.
Wants to act in plays or help put them on.
Wants to build, repair or maintain cars or boats.
Wants to take part in discussion groups with special leaders on civic affairs, careers, health, etc.
Wants to learn foreign languages (outside of school).
Wants to play chess.
Wants to read interesting and worthwhile books.
Wants to go to meetings of clubs and organizations.

Wants to attend church, Sunday school, or other religious activities.
Wants to go out on dates.
Wants to listen to popular music on radio, phonograph, or tape.
Wants to listen to classical music on radio, phonograph, or tape.

Went more than five times during the past year for spare time activities to a church or synagogue (not for church services or other religious activities), and to a YMCA building.
Belonged to small clubs or youth groups located in a YMCA, Boys' Club, recreation center, etc.
Belongs to student council, or student government at a school.
Belonged during the past year to school science, mathematics, language, or literary clubs.
Belonged to school newspaper, magazine or annual producers.
Belonged to over six groups.
Belonged to from three to five athletic or sports teams.
If they received $300 to spend as they pleased, would save it to help pay educational expenses after high school.
Either their father or mother has been active in a church or religious organization during the past three years.
Go on out-of-town trips with other adults to whom not related or friends of same age.
Has borrowed more than 10 books from a public library during the past year.
Wants to spend more time in club or group activities with other young people.
Gets together with friends oftener than twice a month to talk, listen to records, radio, TV or to do other things together for fun.

7. The median number of items chosen by all boys is 8.61. The "Passive Boy" is more like to choose from the following 24 responses:

Goes to classical concerts or recitals.
Goes on camping trips for overnight or longer.
Collects stamps, records, pictures, coins, etc.
Makes models of something.
Plays chess.
Rides around in cars for fun rather than to get somewhere.
Just rests and relaxes or does nothing.
Reads for fun or to pass the time away.
Watches TV.

Wants to play miniature golf; sing in a chorus, choir, glee club, etc.; to go swimming; to read interesting and worthwhile books; to ride around in cars for fun rather than to get somewhere; to watch movies (other than TV); to just rest and relax or do nothing; to play games such as cards, checkers, dominoes, etc.; to go out on dates; to talk and joke with friends and acquaintances; to listen to popular music on radio, phonograph, or tape; to watch TV.

He usually goes on out-of-town trips with his family (parents, brothers, or sisters).
He can play a musical instrument (other than a piano).
He has attended an organized summer camp for at least two summers.

The cutting points chosen for the seven activity-interest types for the entire study were:

Intellectual Girl - 15 activities chosen
Intellectual Boy - 13 activities chosen
Outdoor Girl - 17 activities chosen
Outdoor Boy - 15 activities chosen
Dating Girl - 18 activities chosen
Altruistic Girl - 6 activities chosen
Passive Boy - 9 activities chosen

A student will be classified into one of these seven types if any of the activity-interest scores for each respective sex is at the median or above. Should there be more than one activity-interest score above the median, the student will be classified according to which activity-interest score is the highest.

E. THE COMPUTATIONAL PROCEDURES FOR THE SOCIO-ECONOMIC SCALE

Approximately 5,000 cards, which were processed and edited as they came in immediately at the beginning of the data collection process, were subjected to analysis for the very important variable socio-economic status. These cases were from the Washington, D. C., school system and included a census tract code. The census tracts were ranked and stratified first into four categories on an index made up of five indicators: these indicators were public assistance case rate per ten thousand population in 1958; rate of persons in families receiving surplus food per ten thousand population in 1958; rate of applicants eligible for medical aid in 1958; percent of illegitimate births in 1958; and percent of births not receiving prenatal care in 1958. All census tracts in Washington, D. C., were ranked according to these five indicators and given a score which was the sum of the first digit in the ranking. The tracts were then also ranked into three categories as to the percent of births that were non-white in 1958.

The strata then were as follows:

Strata	Score on Socio-economic Index		Percent of Births Non-White in 1958
1	40 or more	and	Under 20%
2	30 to 39	and	Under 20%
3	30 to 39	and	30 to 79%
4	20 to 29	and	30 to 79%
5	20 to 29	and	80% or more
6	Under 20	and	80% or more

Each card (student) was put into one of the above six strata. An attempt was made to get about 150 cards into each strata-sex-age category. The work deck looked as follows:

Strata	Total	Boys Under 17	Boys 17 and over	Girls Under 17	Girls 17 and over
1	599	150	150	150	149
2	504	136	117	137	114
3	530	147	114	150	119
4	460	119	97	142	102
5	450	122	90	122	116
6	599	150	149	150	150
	3,142	1,541	717	851	750

These 3,142 cases were carefully edited and a new purposive sample *of 50 cases taken from each strata, sex and age group (under 17 years of age and* 17 years of age and older). With this sample of 50 x 6 x 2 x 2 cases (600 cases with strata, sex, and age controlled), the distribution differences between strata for all questionnaire items were studied. By combining adjacent strata, four strata differences were compared instead of six. Only background data pertinent to a socio-economic status score were used and specific activities engaged in by the respondent were not used in the item analysis. Particular items were candidates for inclusion into the socio-economic status score whenever a clear-cut gradient in percentages was apparent. Furthermore, the gradient had to be apparent for both sexes examined individually. The six original strata were then arranged again into three strata according to the amount of non-white residents in the area. Again comparisons of the strata were made for consistency of the direction and amount of gradient differences. The items finally picked for inclusion into the socio-economic status scale, a scale which intends to measure the "plane of living" of high school students, have been selected because they fulfilled the following criteria:

1. The comparison between the strata having the highest percentage of non-whites with the strata having the lowest; this comparison must yield a difference of at least 7-1/2%. It is assumed here that white areas have a higher plane of living than the non-white.

2. Both sexes showed a difference in the correct direction and the same direction.

3. The comparison between the top strata (a high percentage of white persons) and the middle strata agreed also with the above two criteria.

4. The comparison between the top status strata (high socio-economic tract) with the low status strata (low socio-economic tract) yielded a difference of at least 7-1/2%.

5. Items in which the average deviation was greatest among the four status areas were selected in the analysis which used criterion 4.

6. The 26 items fulfilling all of the above criteria were selected because in essence they showed the widest differences in the strata by two methods of comparison. This analysis had to be quickly done to get some estimate of the adequacy of the items that were asked with the purpose of socio-economic status in mind. The sample although it controlled the effects of age, sex was not representative of any universe of cases that we are studying. But it is a beginning which can be checked when analysis of all cases has been completed. A second sample of 5,000 has also been studied to ascertain the differences between the "high scorers" and the "low scorers" in the usual conventional item-analysis. All of the 26 items again were discriminating between the high and the low scorers. A third sample from the first Work Deck A was purposively constructed holding sex, age, and density region constant. Another item-analysis was made with essentially the same items again discriminating between high and low scorers. While further samplings could give us confidence in the validity and reliability of this ordinal scale, it is only the final universe of over 62,000 youth which, when compared with a second city in the midwest which has 4,200 in the sample, will state in precise probability statements the level of confidence that the discriminating items have some generality of discourse.

The socio-economic score is computed as follows by machine:

[2(26 - number of items selected) + 3(the number of + items) + 1(the number of -items)] -43.

These scoring procedures eliminated all minus scores with the use of a constant and therefore saved valuable space on the IBM cards. The possible range is 0 to 26 points. A high score indicates a high socio-economic status; the cutting point for a dichotomy of high vs. low is 14 or more points for high status. The items chosen (if they are +items) are given one point and there are 17 of these. The negative items (there are 9 of them) are given a -1 scoring. Items that are omitted are given 0 as a scoring. In a hand scoring of this scale, it is possible to remove minus numbers by evaluating the minus items with a +one point; the +items are given three points; omissions are given two points. The items used are:

Socio-Economic Score: Discriminating Items Used

1 Point Items:

He plans to finish high school.
He is taking a business course.
Neither of his parents finished high school.
One of his parents finished high school but not the other.
He gets to his spare time activities by using public transportation.
He gets to his spare time activities by walking.
He prefers to have fun with his family rather than friends.
If he had $300 to spend as he wished, he would buy necessities for use right now.
The boy would like to be an electrician; the girl would like her husband to be one.

3 Point Items:

He usually gets to spare time activities by using his own car or his family's car.
He usually gets to spare time activities by being driven by a friend.
He goes on out-of-town trips with his family.
He lives with both his father and mother.
His family has a car.
He can usually get the family car to use for spare time activities.
Part of his home is cooled by some kind of machinery other than a fan.
His family subscribes to 3 or more weekly or monthly magazines.
There are more than 50 books in his home.
He has attended an organized summer camp for at least two summers.
The boy would like to be a lawyer; the girl would like her husband to be one.
The boy would like to be a physician; the girl would like her husband to be one.

If he had $300 to spend as he wished, he would buy a car or pay the expenses on a car.
He is taking a college preparatory course.
His home has a recreation room other than the living or dining room.
His family has two or more cars.
There is an electric dishwasher in his home.

F. AD HOC SCALES

In addition to the seven activity-interest scores, the benefit pattern profile and the socio-economic status score, there are 13 other scales. They are summary scores and are intended to test hypotheses concerning age, sex, and suburbia differences in the seven types of youth. These scales are now listed:

1. The number of activities done: scored with a range of 0 to 77.

2. The number of activities desired: scored with an undetermined range as of now since a quality control score will eliminate cases in which instructions were not followed. The respondent was asked to pick 20 items. He was not always able to do so. This is a measurement of passivity or restriction of activity-interest.

3. The diversity of recreation places used score: this is intended to measure the range of types of recreation facilities used by the respondent. The range is 0 to 14.

4. The diversity of membership score: intended to measure the number of specific types of memberships in groups that the respondent had. The range is 0 to 13 points.

5. The family centeredness score: intended to measure the amount of recreational activities engaged in by the respondent with his family. The range is from 0 to 9 points.

6. The respondent's group membership score: intended to measure the number of groups the respondent belongs to. The maximum score is 12 points.

number of groups the respondent belongs to. The maximum score is 12 points.

7. The car use score with 8 items is intended to measure the availability of the automobile to the respondent in going to leisure time activities. The lack of the use of an automobile is a serious constrictor of what leisure time activities are available to the respondent. It is also a substantial ingredient of the socio-economic status score.

8. The quality control check score. A score so designed to reject unacceptable data for our tabular presentations. There are seven conditions in the data which are examined. Should a card have three or more of these conditions, the card is regarded as faulty data. In the main, an expensive and time-consuming editing process has already been engaged in to correct or reject faulty data before machine rejection.

9. The religious activity-interest score. The range is 0 to 6 points.
10. The musical interest score. The range is 0 to 11 points.
11. The drama and art interest score. The range is 0 to 11 points.
12. The sociability score. The range is 0 to 11 points.

The items for these scores are as follows:

Religious Activity Score

The 10 specific items tallied for this scale are:

The student interested in religious activity helps to usher or serve dinners in a church or club; volunteers to paint, type, etc., for a church or club; attends church, Sunday school, or other religious activities; has gone more than five times during the past year for spare time activities to a settlement or neighborhood house operated by a voluntary agency or church, to a church or synagogue, or to a Salvation Army building; and belongs to a church youth group such as teen club, Temple Youth, CYO, Youth Fellowship.

He wants to help usher or serve dinners in a church or club, to volunteer to paint, type, etc., for a church or club; and to attend church, Sunday school, or other religious activities.

Musical Interest Score

The 11 items tallied for this scale are:

The student interested in music indicates that he goes to classical concerts or recitals. He sings in a chorus, choir, glee club, etc. He plays musical instruments and listens to classical music on radio, phonograph, or tape.

He indicates that he wants to go to classical concerts or recitals, to sing in a chorus, choir, glee club, etc., to play musical instruments, and to listen to classical music on radio, phonograph, or tape.

He belongs to a band, orchestra, glee club, choir, etc.

He can play a musical instrument.

Drama and Art Interest Score

The 11 items tallied for this scale are:

The student interested in drama and art visits art galleries, museums, planetariums, etc.; acts in plays or helps to put on plays; paints or draws pictures; writes plays, poems, stories, etc.; goes to plays; and belongs to a dramatics group producing theatricals.

He wants to visit art galleries, museums, planetariums, etc.; to act in plays or help put on plays; to paint or draw pictures; to write plays, poems, stories, etc.; and to go to plays (legitimate theater).

Family Centeredness Score

The nine items tallied for this scale are:

The family centered individual has fun with his family. Someone in his family drives him to his spare time activities. He usually goes on out-of-town trips with his family (parents, brothers, or sisters) or other relatives.

He lives with at least five other members of his family. He lives with both his father and mother and two or more brothers or sisters under 18. His home has a recreation room.

He prefers to have fun with his family rather than with friends.

Respondent Group Membership

1 Point Items:

He is an officer or committee chairman of a club or group.
He wants to spend more time in club or group activities with other young people.
There are more than four young people in his circle of friends with whom he has fun about once a month or oftener.
He gets together with his friends oftener than twice a month to talk, listen to records, radio, TV or do other things together for fun.
He belongs to less than three groups.
He belongs to one or two athletic or sports teams.

2 Point Items:

He belongs to three to five groups.
He belongs to three to five athletic or sports teams.

3 Point Items:

He belongs to six or more groups.
He belongs to six or more athletic or sports teams.

Car Use Score

1 Point Items:

He uses public transportation (to get to spare time activities).
He walks.

3 Point Items:

If he received $300 to spend as he pleased, he would buy a car or help pay the expenses on a car.
He drives his own car or the family car.
A friend drives him to his spare time activities in a car.
His family has a car.
He can usually get the use of the family car to get to spare time activities.
His family has two or more automobiles.

Occupational Aspiration Score

The respondent is asked: Circle three occupations which are most like what you believe you will actually be doing for a living when you are about 30 years old. If you are a girl, answer according to what you expect your future husband will be doing for a living. The score is the median choice of the three elected. Each occupation is given from 0 to 12 points. The method for scoring was developed from work done by Sims and by the North-Hatt scale of occupations. The procedure by which scale values were arrived at are not reported on here.

Occupation	Score Value
Banker	11
Janitor	0
Lawyer	10
Barber	4
Teacher	8
Policeman	6
Minister	11
Bookkeeper	6
Coal Miner	1
Truck Driver	2
Physician	12
Electrician	7
Civil Engineer	10
Carpenter	5
Gas Station Man	2
Captain in Army	9
Radio Announcer	8
Elevator Operator	0
Auto Mechanic	5
Owner of Factory Employing 100 Men	9

Major Research Contributions

The present preliminary report can only give a few major summary findings. Sixty nine thousand and one hundred and fifty two hundred young people in the 7th to 12th grade in the Washington Metropolitan Region and Four thousand two hundred youth in the 9th to 12th grades in Flint, Michigan (making a total of seventy three thousand three hundred and fifty two persons) were given an eight page questionnaire concerning their leisure time or "spare time". All seventy three thousand three hundred and fifty two persons answered also one of a set of sixteen questionnaires so distributed randomly that any one of these latter represent a random sample of about one sixteenth of the total universe of persons questionnaired.

The present summary deals only with the relative frequency of youth whose activity-interests have been measured. Statistical groupings by sex, age, density region, school grade and school system jurisdiction will be reported on. An analysis of the appetition for each of seventy seven recreational activities will not be given here. Means, medians and quartiles for nineteen scores are presented which measure the number of activities done, the number of activities desired to be done more often, the diversity of recreation places used, the diversity of membership in clubs, family-centered recreation, respondents group membership, extent of availability of an automobile for recreational use, musical interest, drama and art interest, religious activity interest, sociability interest, occupational aspiration, and socio-economic score. Of central interest are the three scores for boys and the four scores for girls which are employed to classify youth according to their leisure time activity-interests. The labels for these scores are intended to reflect prosaic common-sense stereotypes. These types of persons classified according to their leisure time interests are:

(a) A boy or girl whose interests are in activities which take place in the outdoors. This does not mean that the interest is necessarily in physical or energetic exercise of the body. The items involved in these scales are not the same for the boy and girl.

(b) A boy or girl whose interests are in activities which are intellectual or cultural. The items on the scales again are not the same for the boy and girl.

(c) A boy whose interests are passive, solitary, sedentary, or as a spectator.

(d) A girl whose interests are predominantly altruistic. An unsuccessful attempt was made to establish this type of interest-complex in the first five thousand cases studied in boys.

(e) A girl whose interests are in activities associated with social dating.

(f) A residual category or indeterminate type of boy and girl whose number of activity-interests is below the median of all boys' or all girls' activity-interests scores respectively. The highest score (if it is above the universe median) which a boy or girl receives determines the classification he or she is in. The scores are computed as percentages of what the top total score can be. The indeterminate type is not above the median in any of these activity-interest scores.

Findings:

1. The test instruments themselves as reported in the Appendix A represent the development of six pretests to determine the range of adolescent's leisure time activities. The hundreds of items finally used measure the entire spectrum of such leisure time activities which are lawful and not delinquent-type acts. One thousand of eight thousand high school students were asked in one pre-test to write in specific recreation activities in response to open end questions. The items used in the present test instruments include any recreational activity engaged in by teen-agers which was mentioned at least once by these thousand persons. It is reasonable to judge that the full spectrum of leisure time pursuits has been measured.

2. The second research contribution is methodological. With the invention of a simple, inexpensive porto-punch device, respondents may punch their answers directly on to the card with a plastic stylus and special plastic pad which can be repeatedly used. This is an immense saving inkey-punch operators' expense. The cost of developing, processing and analyzing forty four items of information is about one cent per person. This method is of importance to survey research with and without hypothesis because of its relative cheapness.

3. The percentage of 9th to 12th grade boys in the Washington Metropolitan Region whose activity-interests are predominantly in outdoor activities is 46%; about 23%are boys whose recreational activities are passive—that is sedentary or isolated (done alone) or as a spectator. About 4.27% boys are those whose activity-interests are intellectual and cultural. About 26% of the boys were of a residual indeterminate category. These were boys whose activity-interest scores (Outdoor, Passive or Intellectual) were below the median of all boys in the ninth thru twelfth grade. At the present time the full significance of the relationship of the indeterminate type to other types is not known and further research is indicated.

4. Comparison of Flint, Michigan boys reveals similar percentages: 50.1% 24.5%, 2.1%, and 23.4%.

5. The percentage of ninth to twelfth grade girls in the Washington Metropolitan Region whose activity-interests are predominantly in outdoor activities is 31.8%; the intellectual or culturally interested girls is about five times that of boys, that is, 21.1%. The girls whose predominant activity interest in recreation is that of dancing and dating is 13.3%. Altruistically oriented girls make up ten per cent of the population. These percentages are close to what obtains in Flint, Michigan. For instance, the altruistic girls in Flint make up 10.9% of the total sample of girls. These summary figures have been given on page 32 of this report.

6. The great variety of activities done and the great variety of activities desired to be done by teen-agers is to be noted.

   The summary measures of the actual number of activities done indicate that the medians for sub-groupings of persons (by county and density regions) range from 23.7 to 26.5 activities out of a 77 activities presented to the respondent. The counting of the number of activities done includes only those activities mentioned in the booklet that all students answered; the counting of an additional sixty one activities which are mentioned in the sixteen special booklets has not been completed. Therefore, the complete state of affairs concerning the average number of activities done is not known. This measurement of activities done is a valuable one for identifying individuals whose range of activities is limited and it would be wise to study these eventually for their characteristics.

7. A presentation of the summary medians and means for nineteen scores is presented in Table G. It will be seen that these summary medians do not vary greatly in most instances when classified by regional density or residence but are somewhat constant. Significant differences in these scores will be found when further research is done using the two basic ideas concerning recreational interests of youth: namely, the importance of socio-economic status which is likely to override the effects of regional density (suburbia vs. in-towners), and the importance of a classification of youth by their recreational activity-interests. The constancy of these average scores indicates the presence of some individual idiosyncratic hierarchy of values relatively unaffected by place of residence but highly likely to be affected by opportunity as expressed by the variable socio-economic status. A sizeable ingredient of this status in youth is the availability of a car for transportation to recreational facilities.

TABLE E

Percent Distribution of Activity-Interest Types in 61393 Ninth to Twelfth Grade High School Students in the Washington Metropolitan Area and in 4162 Tenth to Twelfth Grade Students in Flint, Michigan by Place of Residence

	BOYS				GIRLS				BOYS	GIRLS
	Washington, D. C.	P. G. County, Md.	Mont. County, Md.	Arl., Alex., F. Church and Fairfax County, Va.	Washington, D. C.	P. G. County, Md.	Montgomery County, Md.	Arl., Alex., F. Church and Fairfax County, Va.	Flint, Mich. 10th to 12th Grade	Flint, Mich. 10th to 12th Grade
Outdoor: high S.E. status	.10	.19	.31	.30	.07	.12	.23	.19	.21	.12
Outdoor: low S.E. status	.36	.29	.14	.15	.18	.23	.14	.14	.29	.21
Intellectual: high S.E. status	.022	.020	.041	.035	.08	.10	.21	.22	.012	.12
Intellectual: low S.E. status	.035	.010	.006	.009	.09	.05	.03	.04	.008	.06
Passive: high S.E. status	.07	.11	.20	.20					.14	
Passive: low S.E. status	.10	.11	.06	.08					.11	
Altruistic: high S.E. status					.02	.03	.03	.03		.02
Altruistic: low S.E. status					.15	.08	.03	.03		.08
Dating: high S.E. status					.04	.04	.07	.09		.05
Dating: low S.E. status					.11	.08	.04	.06		.08
Indeterminate: high S.E. status	.06	.08	.13	.12	.04	.07	.10	.09	.07	.06
Indeterminate: low S.E. status	.26	.20	.11	.10	.23	.21	.11	.11	.17	.19

Percent of Activity-Interest Types in 29633 Boys and 31760 Girls in the Ninth thru Twelfth Grades: Washington Metropolitan Area, by Density Regions and Socio-Economic Status

Activity-Interest Types	BOYS			GIRLS		
	Density Region I (High)	Density Region II (Medium)	Density Region III (Low)	Density Region I (High)	Density Region II (Medium)	Density Region III (Low)
Outdoor: high S.E. status	4.37	(-)21.94*	27.72	2.0	14.7	18.4
Outdoor: low S.E. status	44.55	22.38	19.15	(-)19.1*	17.2*	15.8*
Intellectual: high S.E. status	.81*	3.27	(-)3.18*	2.2	16.1	18.5
Intellectual: low S.E. status	4.44*	1.68	(-).76*	9.5	6.2*	(-)3.8*
Passive: high S.E. status	2.19	15.07	17.13			
Passive: low S.E. status	(-)10.26*	9.29*	7.77*			
Altruistic: high S.E. status				(-)1.1*	2.5	2.7
Altruistic: low S.E. status				21.3*	(-)6.7*	(-)4.9*
Dating: high S.E. status				1.4*	6.2	7.0
Dating: low S.E. status				13.3	7.2	5.9
Indeterminate: high S.E. status	1.72	10.28	11.27	1.1	7.5	8.8
Indeterminate: low S.E. status	31.67	16.09	13.01	28.9	15.7	14.1*
Total persons	2972	12345	14316	3591	13286	14883
%in "Upper" Socio-Economic Status	9.09	50.56	59.30	7.8	47.0	55.4

Legend: *Significant Chi^2 values at .05 level; (-) indicates deficiency from expected frequencies. Calculated separately for each of two S.E. status levels.

Summary of Chi^2 Values for Contingency Tables Relating Regional Density to Types of Activity Interests in (a) boys with high S. E. Status; (b) boys with low S. E. Status; (c) girls with high S. E. Status; (d) and girls with low S. E. Status.

	High Density Region I	Medium Density Region II	Low Density Region III
BOYS			
Upper Class Outdoors	.46	(-) 5,43*	3,53
Lower Class Outdoors	2,91	(-) 2,93	.11
Upper Class Intellectual	5,18*	3,57	(-) 3,92*
Lower Class Intellectual	29,08***	2,07	(-) 27,25***
Upper Class Passive	(-) 2,38	.85	.27
Lower Class Passive	(-) 60,43***	5,28*	7,74*
Upper Class Indeterminate	(-) .01	1,91	(-) 1,30
Lower Class Indeterminate	3,41	(-) .12	(-) 1,25
GIRLS			
Upper Class Outdoor	(-) 3,78	(-) 2,11	2,62
Lower Class Outdoor	(-) 10,5***	4,8*	5,35*
Upper Class Intellectual	(-) 2,57	.50	(-) .11
Lower Class Intellectual	.83	18.***	(-) 13,4***
Upper Class Altruistic	(-) 39,45***	.20	(-) 2,39
Lower Class Altruistic	215,6***	(-) 8,4*	(-) 33,2*
Upper Class Dating	5,22*	.21	(-) .67
Lower Class Dating	3,16	.01	.05
Upper Class Indeterminant	(-) .32	.41	(-) .01
Lower Class Indeterminant	2,22	(-) 1,24	5,98*

Legend: *Significant Chi^2 Values at .05 level;
***Indicates significance at < .001 level.

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Number of Activities Done

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	Number of cases
Washington, D.C.	9-12th	High	17.3	23.9	31.1	21.18	6563
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	18.4	24.7	32	22.13	7231
Washington, D.C.	9-12th	Medium	18.4	24.7	31.8	21.95	7579
Prince Georges County, Md.	9-12th	Medium	17.5	23.7	30.2	20.88	5157
Montgomery County, Md.	9-12th	Medium	18	24.2	30.9	21.42	5706
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	18.9	25.3	32.6	22.74	11542
Washington, D.C.	9-12th	Low	18.7	25.1	32.4	22.51	1591
Prince Georges County, Md.	9-12th	Low	17	23.2	29.9	20.46	8033
Montgomery County, Md.	9-12th	Low	18.3	24.7	31.6	21.90	8033
Catholic Girls and Private Boys School	9-12th		17.8	24.1	31.2	21.57	1280
Flint, Michigan	10-12th		18.2	24.5	31.6	21.92	3854
Prince Georges County, Md.	7-8th	Low	18	24.9	32.5	22.34	670
Washington, D.C.	7-8th	High	19.8	27.3	35.6	24.64	721
Washington, D.C.	7-8th	Medium	19.1	25.9	33.6	23.43	659
Montgomery County, Md.	7-8th	Medium	18.5	25.5	33	22.61	665
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	19.3	26.5	34	23.85	2199

NOTE: Tables 1-12 have the same Number of Cases.

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Number of Activities Desired

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean**	N*
Washington, D.C.	9-12th	High	18.4	19.7	20.6		
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	19.3	19.9	20.6		
Washington, D.C.	9-12th	Medium	18.6	19.7	20.5		
Prince Georges County, Md.	9-12th	Medium	19.1	19.8	20.5		
Montgomery County, Md.	9-12th	Medium	19.2	19.9	20.6		
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	19.3	20	20.6		
Washington, D.C.	9-12th	Low	19	19.8	20.5		
Prince Georges County, Md.	9-12th	Low	19.1	19.8	20.6		
Montgomery County, Md.	9-12th	Low	19.2	19.9	20.6		
Catholic Girls and Private Boys School	9-12th		19.2	19.9	20.6		
Flint, Michigan	10-12th		19.3	19.9	20.6		
Prince Georges County, Md.	7-8th	Low	18.6	19.8	20.6		
Washington, D.C.	7-8th	High	17.5	19.6	20.5		
Washington, D.C.	7-8th	Medium	15.9	19.2	20.3		
Montgomery County, Md.	7-8th	Medium	19.1	19.9	20.6		
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	19.3	19.9	20.7		

*Tables 1-12 have the same number of cases.

**Not Applicable.

TABLE G: Part III

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Diversity of Recreational Places Used

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	1.4	2.5	3.7	1.69	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	1.4	2.3	3.4	1.46	
Washington, D.C.	9-12th	Medium	1.5	2.5	3.6	1.67	
Prince Georges County, Md.	9-12th	Medium	1.4	2.3	3.5	1.50	
Montgomery County, Md.	9-12th	Medium	1.5	2.6	3.7	1.72	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	1.4	2.3	3.4	1.44	
Washington, D.C.	9-12th	Low	1.6	2.6	3.7	1.75	
Prince Georges County, Md.	9-12th	Low	1.3	2.2	3.4	1.43	
Montgomery County, Md.	9-12th	Low	1.5	2.5	3.6	1.63	
Catholic Girls and Private Boys School	9-12th		1.5	2.6	3.6	1.70	
Flint, Michigan	10-12th		1.6	2.6	3.6	1.72	
Prince Georges County, Md.	7-8th	Low	1.2	1.9	3.2	1.21	
Washington, D.C.	7-8th	High	1.3	2.2	3.6	1.55	
Washington, D.C.	7-8th	Medium	1.5	2.5	3.5	1.61	
Montgomery County, Md.	7-8th	Medium	1.4	2.5	3.6	1.62	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	1.2	2	3.3	1.32	

*Tables 1-12 have the same number of cases.

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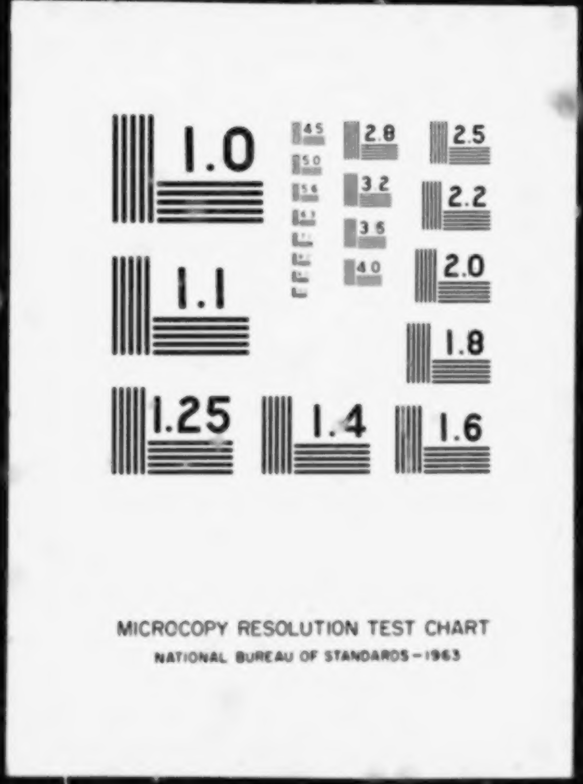
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TABLE G: Part IV

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Diversity of Membership

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	1.4	2.4	3.6	1.62	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	1.6	2.7	3.8	1.85	
Washington, D.C.	9-12th	Medium	1.5	2.6	3.7	1.78	
Prince Georges County, Md.	9-12th	Medium	1.5	2.6	3.7	1.72	
Montgomery County, Md.	9-12th	Medium	1.5	2.6	3.7	1.76	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	1.5	2.7	3.8	1.83	
Washington, D.C.	9-12th	Low	1.6	2.7	3.8	1.90	
Prince Georges County, Md.	9-12th	Low	1.3	2.1	3.5	1.50	
Montgomery County, Md.	9-12th	Low	1.5	2.6	3.7	1.73	
Catholic Girls and Private Boys School	9-12th		1.7	2.7	3.7	1.79	
Flint, Michigan	10-12th		1.3	2.2	3.4	1.45	
Prince Georges County, Md.	7-8th	Low	1.4	2.4	3.6	1.62	
Washington, D.C.	7-8th	High	1.4	2.4	3.5	1.60	
Washington, D.C.	7-8th	Medium	1.5	2.5	3.7	1.73	
Montgomery County, Md.	7-8th	Medium	1.6	2.6	3.6	1.73	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	1.4	2.4	3.6	1.61	

*Tables 1-12 have the same Number of Cases.

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TABLE G: Part V

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Respondents Group Memberships

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D. C.	9-12th	High	1.8	3.2	4.8	1.87	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	2.1	3.7	5.1	2.15	
Washington, D. C.	9-12th	Medium	2.1	3.6	5.1	2.17	
Prince Georges County, Md.	9-12th	Medium	1.9	3.4	4.9	1.98	
Montgomery County, Md.	9-12th	Medium	2.1	3.6	5	2.11	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	2.1	3.6	5	2.11	
Washington, D. C.	9-12th	Low	2.3	3.8	5.3	2.36	
Prince Georges County, Md.	9-12th	Low	1.8	3.1	4.8	1.79	
Montgomery County, Md.	9-12th	Low	2.1	3.6	5.1	2.14	
Catholic Girls and Private Boys School	9-12th		2.3	3.8	5	2.21	
Flint, Michigan	10-12th		1.7	2.9	4.6	1.64	
Prince Georges County, Md.	7-8th	Low	1.5	2.5	4.2	1.30	
Washington, D. C.	7-8th	High	1.7	2.9	4.6	1.67	
Washington, D. C.	7-8th	Medium	2.	3.5	5.	2.07	
Montgomery County, Md.	7-8th	Medium	2	3.5	5	2.04	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	1.7	3	4.7	1.69	

*Tables 1-12 have the same Number of Cases.

TABLE G: Part VI

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Number of Family Orientated Recreational Activities

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	3.1	4.4	5.7	2.98	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	3.3	4.4	5.6	2.10	
Washington, D.C.	9-12th	Medium	3.3	4.5	5.7	3.08	
Prince Georges County, Md.	9-12th	Medium	3.4	4.5	5.7	3.11	
Montgomery County, Md.	9-12th	Medium	3.5	4.7	5.8	3.30	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	3.6	4.8	6.1	3.48	
Washington, D.C.	9-12th	Low	3.5	4.7	5.9	3.30	
Prince Georges County, Md.	9-12th	Low	3.5	4.7	5.9	3.35	
Montgomery County, Md.	9-12th	Low	3.7	4.9	6.1	3.55	
Catholic Girls and Private Boys School	9-12th		3.6	4.9	6.6	3.57	
Flint, Michigan	10-12th		3.3	4.4	5.6	2.97	
Prince Georges County, Md.	7-8th	Low	3.8	5.3	7	3.87	
Washington, D.C.	7-8th	High	3.8	5.3	7.1	3.99	
Washington, D.C.	7-8th	Medium	3.9	5.1	6.7	3.85	
Montgomery County, Md.	7-8th	Medium	3.8	5.1	6.8	3.88	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	4.	5.4	7.1	4.07	

*Tables 1-12 have the same Number of Cases.

TABLE G: Part VII

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Socio-Economic Status Score

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	8.7	10.9	13.4	10.20	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	14.2	17	19.4	15.68	
Washington, D.C.	9-12th	Medium	10.7	13.8	17	12.94	
Prince Georges County, Md.	9-12th	Medium	12.4	15	17.5	13.97	
Montgomery County, Md.	9-12th	Medium	14.6	17.1	19.2	16.92	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	14.6	17.5	19.8	16.19	
Washington, D.C.	9-12th	Low	12	15.8	19.3	14.65	
Prince Georges County, Md.	9-12th	Low	12.1	14.6	17.2	13.64	
Montgomery County, Md.	9-12th	Low	14.9	17.8	20.1	16.40	
Catholic Girls and Private Boys School	9-12th		13.8	16.5	18.9	15.32	
Flint, Michigan	10-12th		12.3	14.9	17.7	14.05	
Prince Georges County, Md.	7-8th	Low	10.9	13.1	15.3	12.18	
Washington, D.C.	7-8th	High	10.5	12.4	14.5	11.52	
Washington, D.C.	7-8th	Medium	14.2	16.5	18.5	15.31	
Montgomery County, Md.	7-8th	Medium	12.9	15.1	17.3	14.04	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	12.4	15.1	11.5	13.98	

*Tables 1-12 have the same Number of Cases.

TABLE G: Part VIII

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Car Use Score

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	3.7	5.6	7.4	3.86	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	6.1	9.2	12.9	7.51	
Washington, D.C.	9-12th	Medium	4.8	6.7	9.6	5.35	
Prince Georges County, Md.	9-12th	Medium	5.7	8.3	12	6.92	
Montgomery County, Md.	9-12th	Medium	6.1	9.0	12.7	7.41	
Arlington, Alexandria, Falls Church and Fairfax, Va.	9-12th	Low	6.5	9.9	13.3	7.92	
Washington, D.C.	9-12th	Low	5.2	7.3	10.8	6.09	
Prince Georges County, Md.	9-12th	Low	5.9	8.6	12	7.04	
Montgomery County, Md.	9-12th	Low	6.3	9.5	13	7.68	
Catholic Girls and Private Boys School	9-12th		5.6	7.8	11.7	6.73	
Flint, Michigan	10-12th		6.9	10.5	13.6	8.29	
Prince Georges County, Md.	7-8th	Low	4.2	6.0	7.7	4.18	
Washington, D.C.	7-8th	High	3.6	5.4	7.1	3.42	
Washington, D.C.	7-8th	Medium	4.6	5.9	7.3	4.06	
Montgomery County, Md.	7-8th	Medium	4.7	6.1	7.5	4.29	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	4.5	6.1	7.8	4.39	

*Tables 1-12 have the same Number of Cases.

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Occupational Aspiration Score

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	5.7	8.1	10.1	8.61	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	7.1	9.4	10.8	7.50	
Washington, D.C.	9-12th	Medium	6.4	8.9	10.6	7.20	
Prince Georges County, Md.	9-12th	Medium	5.9	8.4	10.5	6.84	
Montgomery County, Md.	9-12th	Medium	6.9	9.5	10.9	7.56	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	7.2	9.5	10.8	7.66	
Washington, D.C.	9-12th	Low	6.9	9.6	10.9	7.60	
Prince Georges County, Md.	9-12th	Low	5.4	8.1	10.2	6.56	
Montgomery County, Md.	9-12th	Low	6.8	9.6	10.9	9.78	
Catholic Girls and Private Boys School	9-12th		8.2	10.2	11.1	8.28	
Flint, Michigan	10-12th		5.5	8.2	10.3	6.78	
Prince Georges County, Md.	7-8th	Low	3.8	8.1	10.1	5.99	
Washington, D.C.	7-8th	High	6.5	8.9	10.6	7.12	
Washington, D.C.	7-8th	Medium	8.1	10.1	11.1	8.12	
Montgomery County, Md.	7-8th	Medium	7.2	9.8	10.9	7.71	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	6.4	9.2	10.7	7.26	

*Tables 1-12 have the same Number of Cases.

TABLE G: Part X

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Sociability Score

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D. C.	9-12th	High	4.3	5.9	7.8	6.45	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	4.2	5.9	7.8	5.88	
Washington, D. C.	9-12th	Medium	4.4	6.1	8.0	6.65	
Prince Georges County, Md.	9-12th	Medium	4.1	5.7	7.6	7.1	
Montgomery County, Md.	9-12th	Medium	4.2	5.9	7.8	6.43	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	4.3	5.9	7.8	4.88	
Washington, D. C.	9-12th	Low	4.6	6.2	8.2	6.80	
Prince Georges County, Md.	9-12th	Low	3.9	5.5	7.2	6.07	
Montgomery County, Md.	9-12th	Low	4.2	5.8	7.7	6.38	
Catholic Girls and Private Boys School	9-12th		4.6	6.2	8.2	6.85	
Flint, Michigan	10-12th		4.2	5.7	7.3	6.26	
Prince Georges County, Md.	7-8th	Low	2.7	4.6	6.3	5.23	
Washington, D. C.	7-8th	High	3.8	5.4	6.9	5.90	
Washington, D. C.	7-8th	Medium	3.3	5.1	6.7	5.66	
Montgomery County, Md.	7-8th	Medium	4.1	5.3	6.6	5.81	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	3.4	5.1	6.6	5.65	

*Tables 1-12 have the same Number of Cases.

TABLE G: Part XI

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Drama and Art Interest Score

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean**	N*
Washington, D. C.	9-12th	High	1.6	2.7	4.4		
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	1.5	2.6	4.3		
Washington, D. C.	9-12th	Medium	1.6	2.7	4.5		
Prince Georges County, Md.	9-12th	Medium	1.4	2.3	3.8		
Montgomery County, Md.	9-12th	Medium	1.5	2.5	4.2		
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	1.5	2.5	4.3		
Washington, D. C.	9-12th	Low	1.6	2.7	4.5		
Prince Georges County, Md.	9-12th	Low	1.4	2.3	3.6		
Montgomery County, Md.	9-12th	Low	1.5	2.5	4.3		
Catholic Girls and Private Boys School	9-12th		1.6	2.8	4.6		
Flint, Michigan	10-12th		1.4	2.3	3.7		
Prince Georges County, Md.	7-8th	Low	1.6	2.8	4.5		
Washington, D. C.	7-8th	High	1.9	3.3	4.9		
Washington, D. C.	7-8th	Medium	1.7	3	4.8		
Montgomery County, Md.	7-8th	Medium	1.6	2.7	4.5		
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	1.6	2.8	4.5		

*Tables 1-12 have the same Number of Cases.

**Not Applicable.

TABLE G: Part XII

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Religious Activity Interest Score

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D. C.	9-12th	High	1.4	2.3	3.3	2.42	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	1.2	2.3	3.6	2.41	
Washington, D. C.	9-12th	Medium	1.3	2.2	3.4	2.34	
Prince Georges County, Md.	9-12th	Medium	1.2	2.2	3.5	2.35	
Montgomery County, Md.	9-12th	Medium	1.2	2.3	3.6	2.35	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	1.3	2.1	3.6	2.36	
Washington, D. C.	9-12th	Low	1.4	2.4	3.6	2.46	
Prince Georges County, Md.	9-12th	Low	1.2	2.2	3.2	2.25	
Montgomery County, Md.	9-12th	Low	1.2	2.1	3.1	2.40	
Catholic Girls and Private Boys School	9-12th		1.5	2.5	3.7	2.62	
Flint, Michigan	10-12th		1.1	2.2	3.5	2.31	
Prince Georges County, Md.	7-8th	Low	1.3	2.1	2.9	2.25	
Washington, D. C.	7-8th	High	1.4	2.2	2.9	2.31	
Washington, D. C.	7-8th	Medium	1.1	2.1	3.2	2.14	
Montgomery County, Md.	7-8th	Medium	1.1	2.1	3.2	2.20	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	1.2	2.2	3.3	2.28	

*Tables 1-12 have the same Number of Cases.

TABLE G: Part XIII

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Altruistic Activity-Interest Scores in Girls

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	Number of Cases
Washington, D.C.	9-12th	High	4.8	6.8	8.4	5.32	3591
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	3.9	5.5	7.5	4.24	3666
Washington, D.C.	9-12th	Medium	4.4	6.4	8.1	4.91	4127
Prince Georges County, Md.	9-12th	Medium	4.2	6.0	8.2	4.61	2643
Montgomery County, Md.	9-12th	Medium	4.0	5.7	7.6	4.37	2881
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	4.0	5.7	7.7	4.42	5937
Washington, D.C.	9-12th	Low	4.2	6.0	7.9	4.62	885
Prince Georges County, Md.	9-12th	Low	4.2	6.1	8.2	4.64	4062
Montgomery County, Md.	9-12th	Low	4.0	5.7	7.7	4.41	3999
Catholic Girls Schools	9-12th		4.3	6.0	7.9	4.68	1094
Flint, Michigan	10-12th		4.3	6.0	7.8	4.66	1978
Prince Georges County, Md.	7-8th	Low	4.3	6.2	8.0	4.73	344
Washington, D.C.	7-8th	High	5.0	6.9	8.4	5.34	374
Washington, D.C.	7-8th	Medium	3.8	5.5	7.6	4.21	337
Montgomery County, Md.	7-8th	Medium	4.2	6.1	7.8	4.55	328
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	4.1	5.9	7.7	4.50	1119

NOTE: Tables XIII thru XVI have the same Number of Cases.

TABLE G: Part XIV

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Intellectual Activity-Interest Scores in Girls

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	9.4	13	17.4	9.95	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	11.7	16.1	19.9	12.60	
Washington, D.C.	9-12th	Medium	10.2	14.6	18.8	11.21	
Prince Georges County, Md.	9-12th	Medium	9.7	13.7	18.2	10.53	
Montgomery County, Md.	9-12th	Medium	10.6	15	19.2	11.71	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	11.2	15.8	19.9	12.39	
Washington, D.C.	9-12th	Low	10.9	15.6	19.8	12.20	
Prince Georges County, Md.	9-12th	Low	9.1	12.6	17.3	9.79	
Montgomery County, Md.	9-12th	Low	11	15.7	19.8	12.26	
Catholic Girls Schools	9-12th		10.2	14.2	18.3	10.95	
Flint, Michigan	10-12th		10	14	18.6	11.03	
Prince Georges County, Md.	7-8th	Low	8.7	12.2	16.5	9.06	
Washington, D.C.	7-8th	High	9	12.5	16.9	9.42	
Washington, D.C.	7-8th	Medium	10.3	15	19.2	11.47	
Montgomery County, Md.	7-8th	Medium	10.2	14.2	18.3	10.91	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	9.9	13.8	18.2	10.72	

*Tables XIII thru XVI have the same Number of Cases.

TABLE G: Part XV

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Dating Activity-Interest Score in Girls

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	13.8	17.4	20.9	13.94	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	14.6	18	21.7	14.65	
Washington, D.C.	9-12th	Medium	14.6	18.1	22	14.75	
Prince Georges County, Md.	9-12th	Medium	14.7	17.9	21.4	14.57	
Montgomery County, Md.	9-12th	Medium	14.9	18.3	22.2	15.02	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	15.1	18.5	22.7	15.30	
Washington, D.C.	9-12th	Low	14.6	18.2	22.3	14.84	
Prince Georges County, Md.	9-12th	Low	14.4	17.7	21	14.32	
Montgomery County, Md.	9-12th	Low	14.6	18	21.8	14.69	
Catholic Girls Schools	9-12th		14.8	18.1	21.8	14.84	
Flint, Michigan	10-12th		14.8	17.9	21.2	14.64	
Prince Georges County, Md.	7-8th	Low	14.2	17.5	20.7	14.04	
Washington, D.C.	7-8th	High	14.3	17.8	21.6	14.28	
Washington, D.C.	7-8th	Medium	14.2	17.7	21.4	14.37	
Montgomery County, Md.	7-8th	Medium	14.4	17.5	20.6	14.00	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	14.5	17.6	20.8	14.23	

*Tables XIII thru XVI have the same Number of Cases.

TABLE G: Part XVI

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Outdoor Activity-Interest Scores in Girls

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D. C.	9-12th	High	11	15.2	18.8	11.62	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	12.8	16.6	19.9	13.02	
Washington, D. C.	9-12th	Medium	12.2	16.2	19.6	6.87	
Prince Georges County, Md.	9-12th	Medium	13.1	16.7	19.8	13.15	
Montgomery County, Md.	9-12th	Medium	14	17.2	20.4	13.66	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	14	17.1	20.2	13.57	
Washington, D. C.	9-12th	Low	12.6	16.5	19.8	12.99	
Prince Georges County, Md.	9-12th	Low	13	16.7	19.9	13.10	
Montgomery County, Md.	9-12th	Low	13.6	17	20.3	6.48	
Catholic Girls Schools	9-12th		12.8	16.6	19.8	12.99	
Flint, Michigan	10-12th		13.4	16.8	19.9	13.25	
Prince Georges County, Md.	7-8th	Low	12	16.2	19.7	12.64	
Washington, D. C.	7-8th	High	12.6	16.5	19.6	12.75	
Washington, D. C.	7-8th	Medium	12.5	16.8	20.5	13.27	
Montgomery County, Md.	7-8th	Medium	14.1	17.4	20.7	13.92	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	13.9	17.1	20.4	13.62	

*Tables XIII thru XVI have the same Number of Cases.

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Intellectual Activity-Interest Score in Boys

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	Number of Cases
Washington, D.C.	9-12th	High	9.5	13.8	17.6	11.03	2972
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	9.6	13.7	17.5	11.06	3565
Washington, D.C.	9-12th	Medium	9.9	14.1	17.7	11.32	3452
Prince Georges County, Md.	9-12th	Medium	8.6	12.3	16.4	9.86	2514
Montgomery County, Md.	9-12th	Medium	9.3	13.4	17.2	10.74	2825
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	9.4	13.6	17.5	10.94	5605
Washington, D.C.	9-12th	Low	9.7	14.0	17.9	11.41	706
Prince Georges County, Md.	9-12th	Low	8.3	12.0	16.1	9.47	3971
Montgomery County, Md.	9-12th	Low	9.2	13.4	17.1	10.66	4034
Private Boys Prep Schools	9-12th		10.2	14.7	14.9	12.45	186
Flint, Michigan	10-12th		8.5	12.1	16.3	9.76	1876
Prince Georges County, Md.	7-8th	Low	8.5	12.2	16.2	9.64	326
Washington, D.C.	7-8th	High	9.5	13.9	17.9	11.33	347
Washington, D.C.	7-8th	Medium	9.7	13.7	17.1	11.01	322
Montgomery County, Md.	7-8th	Medium	10.5	14.4	17.7	11.39	337
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	9.0	13.2	17.2	10.54	1080

NOTE: Tables XVII thru XVIX have the same Number of Cases.

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region:

Passive Activity-Interest Scores in Boys

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D.C.	9-12th	High	5	6.9	9.5	5.26	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	6.6	9.1	11.2	7.08	
Washington, D.C.	9-12th	Medium	5.6	7.9	10.4	6.08	
Prince Georges County, Md.	9-12th	Medium	6	8.4	10.6	6.43	
Montgomery County, Md.	9-12th	Medium	6.4	8.9	10.9	6.84	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	6.8	9.2	11.2	7.16	
Washington, D.C.	9-12th	Low	5.9	8.3	10.7	6.48	
Prince Georges County, Md.	9-12th	Low	5.9	8.4	10.7	6.44	
Montgomery County, Md.	9-12th	Low	6.4	8.9	11	6.87	
Private Boys Prep Schools	9-12th		6.7	9.2	11.2	7.10	
Flint, Michigan	10-12th		6.2	8.7	10.9	6.73	
Prince Georges County, Md.	7-8th	Low	5.6	8.1	10.7	6.27	
Washington, D.C.	7-8th	High	5.6	7.9	10.3	6.06	
Washington, D.C.	7-8th	Medium	6.3	8.9	11.2	7.08	
Montgomery County, Md.	7-8th	Medium	7.7	9.6	11.3	7.52	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	6.7	9.1	11.3	7.25	

*Tables XVII thru XVIX have the same Number of Cases.

TABLE G: Part XVIX

Means, Medians and Quartiles of Nineteen Scores by Place of Residence and Density Region

Outdoor Activity-Interest

Place of Residence	Grade	Density Region	Q_1	Q_2	Q_3	Mean	N*
Washington, D. C.	9-12th	High	12.1	15.5	19	13.52	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Medium	12	15.2	19	13.46	
Washington, D. C.	9-12th	Medium	11.8	15.2	18.9	13.29	
Prince Georges County, Md.	9-12th	Medium	12	15.4	19	13.60	
Montgomery County, Md.	9-12th	Medium	12.1	15.4	19.1	13.62	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	9-12th	Low	12.5	16.0	19.4	14.00	
Washington, D. C.	9-12th	Low	11.8	15.0	18.7	13.27	
Prince Georges County, Md.	9-12th	Low	12.4	15.8	19.3	13.90	
Montgomery County, Md.	9-12th	Low	12.2	15.7	19.2	13.78	
Private Boys Prep Schools	9-12th		12.3	15.5	20	13.87	
Flint, Michigan	10-12th		12.9	16.2	19.6	14.31	
Prince Georges County, Md.	7-8th	Low	12.9	16.6	19.7	14.07	
Washington, D. C.	7-8th	High	14.1	18.2	21.7	15.86	
Washington, D. C.	7-8th	Medium	12.1	15.6	19.4	13.80	
Montgomery County, Md.	7-8th	Medium	12.8	16.9	20.2	14.69	
Arlington, Alexandria, Falls Church and Fairfax County, Va.	7-8th	Low	13.4	17.1	20.7	15.08	

*Tables XVII thru XVIX have the same Number of Cases.

8. The following summary analysis is made from the basic table in Appendix E, Indices of Relative Frequencies of Activity-Interest Types in Washington, D. C. by Density Regions, Age and Socio-Economic Status. Although it seemed that a chi square analysis could appropriately be used to determine the effect of age, sex, density region (place of residence), socio-economic status and school jurisdiction upon the relative frequency of the basic classification of youth according to their recreational activity-interests, a fundamental assumption concerning the null hypothesis of independence of observations was not met. The items used, for instance, in the altruism score and the intellectual interest score, may in some cases be the same. Therefore, the scores were not based on independent observations as required for the null hypotheses concerning contingency tables.

There were three considerations taken into account in the scoring procedures. Take going to classical concerts or recitals as an example. Preliminary item analysis indicated that the outdoor boy engaged in this activity less frequently than either the passive or the intellectual (culturally interested) boy. To avoid a minus scoring and consequently seven IBM card columns of space, the item was regarded both as a plus one item contributing to the passivity score, and as a plus one item contributing to the intellectual activity-interest score. The three considerations were, then: (1) to save valuable card space; (2) to reflect the reality that any given activity may satisfy more than one "motive" or recreational activity-interest type; and (3) that the scores reflect the actual simple count of activity-interests.

At this stage of the research the best that can be done until an item analysis based on the entire universe or on a representative or purposive sample of it is completed, is to build indices. The indices in Appendix E are based on the information in Appendix D wherein the percentages within a column (the marginal percentage total for each column being 100%) are divided by the marginal percentage for each row (the total of all marginals for all rows is 100%and is equal to the number of cases in the table.) Each sexwasdone separately as was each jurisdiction. The ensuing analysis concerns the direction of the trends in the indices.

Let us examine the effect of age on the relative frequency of boys with outdoor activity-interests first. Henceforth we shall call boys and girls who have been typed by the procedures delineated elsewhere in this report as having "high" activity-interests—outdoor, intellectual, passive, dating and altruistic.

Boys With High Outdoor Activity-Interests: The relative frequency of boys under 16 years of age is greater than that of boys 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. status	Yes	Yes	Yes
Prince Georges County High S.E. status		No	No
Montgomery County High S.E. status		No	No
Virginia High S.E. status		No	No
Flint, Michigan High S.E. status		No	
Washington, D.C. Low S.E. status	Yes	Yes	No
Prince Georges Low S.E. status		Yes	Yes
Montgomery County Low S.E. status		Yes	Yes
Virginia Low S.E. status		Yes	Yes
Flint, Michigan Low S.E. status		Yes	

The generalization for Outdoor Boys is that in the higher status persons (with exceptions to be noted) the relative frequency is greater in the older boys, 16 years or more years of age, than in the younger. The exception is in all of Washington, D.C. We have asked no questions concerning race.

The generalization for Outdoor Boys of lower socio-economic status is that the relative frequency of younger boys is greater than for the older. Exception: the least dense sections of Washington, D.C. A possible interpretation for this exception is that there are not many lower status boys living in that part of D.C. which has the most green acres per person to enjoy or use recreationally. Those that do live there may be recent migrants. We do not know their nationality or racial origins or their parents' occupation.

Of great interest is the assertion that American boys are passive and sedentary in their recreational interests. The generalization we have here is that in lower status boys the relative frequency of passive youth declines with age. Exceptions: none.

In the higher status boys the generalization is complicated. Everywhere in Density III, the relative frequency of passive boys is greater in the young. Everywhere else the older boys' relative frequency of passive activity interests is greater than in the young. Exception: Virginia.

Boys With High Passive Activity-Interests: The relative frequency of boys under 16 years of age is greater than that of boys 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	No	No	Yes
Prince Georges County High S.E. Status		No	Yes
Montgomery County High S.E. Status		No	Yes
Virginia High S.E. Status		(Yes)	Yes
Flint, Michigan High S.E. Status		No	
Washington, D.C. Low S.E. Status	Yes	Yes	Yes
Prince Georges County Low S.E. Status		Yes	Yes
Montgomery County Low S.E. Status		Yes	Yes
Virginia Low S.E. Status		Yes	Yes
Flint, Michigan Low S.E. Status		Yes	

Everywhere the relative frequency of Intellectual Boys is greater in the older boys than in the younger. The exceptions are parenthesized. They are low status persons residing in areas reputed to be of high status, that is, Montgomery County, Maryland, one of the wealthiest counties in the United States and the least densely populated sections of Washington, D.C.

Boys With High Intellectual Activity-Interests: The relative frequency of boys under 16 years of age is greater than that of boys 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	No	No	No
Washington, D.C. Low S.E. Status	No	No	(Yes)
Prince Georges County High S.E. Status		No	No
Prince Georges County Low S.E. Status		No	No
Montgomery County High S.E. Status		No	No
Montgomery County Low S.E. Status		(Yes)	No
Virginia High S.E. Status		No	No
Virginia Low S.E. Status		No	No
Flint, Michigan High S.E. Status		No	
Flint, Michigan Low S.E. Status		No	

The exact meaning of the "Indeterminate" category of boy is not known now. It may mean "all around" boy although this is unlikely since the amount of activity-interests that these boys had is quite high. It is possible that it is a residual category which unfortunately has a fourth or fifth type of person which our analysis as yet has missed. It is remarkable that no altruistic type of boy was found, nor a Dating Boy nor a Conventional Boy who is restricted and limited in his interests by doing only that which is popular and most easy to do. When the entire universe is restudied, these types may be found.

The generalization is that everywhere the relative frequency of boys 16 or more years old who are "Indeterminate" is greater than in the younger boy.

Boys With Indeterminate Activity-Interests: Relative frequency of Boys under 16 years of age is greater than that of boys 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	No	No	No
Prince Georges County High S.E. Status		No	No
Montgomery County High S.E. Status		No	No
Virginia High S.E. Status		No	(Yes)
Flint, Michigan High S.E. Status		No	
Washington, D.C. Low S.E. Status	No	No	No
Prince Georges County Low S.E. Status		No	No
Montgomery County Low S.E. Status		No	No
Virginia Low S.E. Status		No	No
Flint, Michigan Low S.E. Status		No	

The generalization for Outdoor Girls is simple: the relative frequency is greater in the young than in the older girls. There is one exception: again the low status persons in Density III in Montgomery County. Also in Flint, Michigan which has an expensive philanthropic program of crafts, arts, and sport facilities and all day use of school buildings from 8 A.M. to 10 P.M., the high status older girls are relatively more frequently the Outdoor type.

Girls With High Outdoor Activity-Interests: The relative frequency of girls under 16 years of age is greater than that of girls 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	Yes	Yes	Yes
Prince Georges County High S.E. Status		Yes	Yes
Montgomery County High S.E. Status		Yes	Yes
Virginia High S.E. Status		Yes	Yes
Flint, Michigan High S.E. Status		(No)	
Washington, D.C. Low S.E. Status	Yes	Yes	Yes
Prince Georges County Low S.E. Status		Yes	Yes
Montgomery County Low S.E. Status		Yes	(No)
Virginia Low S.E. Status		Yes	Yes
Flint, Michigan Low S.E. Status		Yes	

The generalization for the intellectual or culturally oriented girl is that everywhere older girls are more frequently than younger girls this type.

Girls With High Intellectual Activity-Interests: The relative frequency of girls under 16 years of age is greater than that of girls 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	No	No	No
Prince Georges County High S.E. Status		No	No
Montgomery County High S.E. Status		No	No
Virginia High S.E. Status		No	No
Flint, Michigan High S.E. Status		No	
Washington, D.C. Low S.E. Status	No	No	No
Prince Georges County Low S.E. Status		No	No
Montgomery County Low S.E. Status		No	No
Virginia Low S.E. Status		No	No
Flint, Michigan Low S.E. Status		No	

Altruistic girls are relatively more frequently present among the older than in the younger everywhere except in all high status Virginia girls and in low status Montgomery girls in Density II.

Girls With High Altruistic Activity-Interests: The relative frequency of girls under 16 years of age is greater than that of girls 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	No	No	No
Prince Georges County High S.E. Status		No	No
Montgomery County High S.E. Status		No	No
Virginia High S.E. Status		(Yes)	(Yes)
Flint, Michigan High S.E. Status		No	
Washington, D.C. Low S.E. Status	No	No	No
Prince Georges County Low S.E. Status		No	No
Montgomery County Low S.E. Status		(Yes)	No
Virginia Low S.E. Status		No	No
Flint, Michigan Low S.E. Status		No	

The dating girl is relatively more frequently prevalent in the older girls than in the younger with these unexplained exceptions:

(1) Upper status Prince Georges Girls (a minority)
(2) Low status Prince Georges Girls in Density II
(3) High Status Montgomery County Girls in Density II.

Girls With High Dating Activity-Interests: The relative frequency of girls under 16 years of age is greater than that of girls 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	No	No	No
Prince Georges County High S.E. Status		(Yes)	(Yes)
Montgomery County High S.E. Status		(Yes)	No
Virginia High S.E. Status		No	No
Flint, Michigan High S.E. Status		No	
Washington, D.C. Low S.E. Status	No	No	Yes
Prince Georges County Low S.E. Status		(Yes)	No
Montgomery County Low S.E. Status		No	No
Virginia Low S.E. Status		No	No
Flint, Michigan Low S.E. Status		No	

Generally, the Indeterminate Girl is more prevalent in the older than in the younger but the pattern is not clear.

Girls With Indeterminate Activity-Interests: The relative frequency of girls under 16 years of age is greater than that of girls 16 or more years of age

	In Density Region I (High)	In Density Region II (Medium)	In Density Region III (Low)
Washington, D.C. High S.E. Status	Yes	No	No
Prince Georges County High S.E. Status		No	No
Montgomery County High S.E. Status		No	No
Virginia High S.E. Status		Yes	Yes
Flint, Michigan High S.E. Status		No	
Washington, D.C. Low S.E. Status	No	Yes	No
Prince Georges County Low S.E. Status		No	Tie
Montgomery County Low S.E. Status		No	No
Virginia Low S.E. Status		No	No
Flint, Michigan Low S.E. Status		Yes	

The differences are of minor extent. There is a lack of pattern here.

It is obvious that age is a determinant of the relative incidence of these types of youth. In the selection process which determines who shall remain in high school, it is possible that it is the indeterminate type of boy and girl who leaves school. Any assessment of the recreational needs of a community must clearly keep in mind the rapid solidification of recreational interests taking place in a community around the age of 16. We have no evidence, however, that recreational activity-interest patterns in individuals are stable and fixed thruout life tempered by economic opportunity and biological deterioration. Our typology not only engenders that hypothesis as well as the hypothesis of changing recreational interests thru life. While the specific content of recreational interests may change or vary thruout a life time, it is the latent structure of these interests which may remain fixed or stable.

The recent suburbanization of our population has presented a number of common-sense assertions that suburbanization produces conformity, dullness and wasted potential for the self-realization of individual talents in our youth. Talented persons need to be identified, sought out, developed and encouraged to be givers to their country's welfare rather than solely takers from it.

Loyalty to one's country consists in giving whatever we possess for the betterment of all. Talent is developed in the young thru leisure-time pursuits since many of their specific interests become in time not recreational in nature but rather occupational or professional. One common-sense assertion made is that frequently young persons are a "risk" to their country's welfare when they refuse or cannot overcome their insecurity in being individuals who realize their unique interests or talents. Those who hide their talents or are made to feel ashamed or defensive about their recreational interests because they are derived by the majority or by the ignorant or by the untalented, are of course showing little loyalty to their country's welfare.

The ensuing analysis concerns comparisons of indices of relative frequency between Density Regions.

Generalization 1.

Washington, D. C. high socio-economic status boys and girls: the direction of the increments in the indices is for all types positive. That is, Density III has more of each type than Density II; and in turn Density II has more than Density I. There is only one exception (See Figure 1, Part 9). There is an excess of number of altruistic young girls in Density I of Washington, D. C.

Generalization 2.

Washington, D. C. lower socio-economic status boys and girls. Here, the generalization is exactly the reverse of generalization 1. The direction of all increments in the indices is for all types negative. That is, Density III has less of each type than Density II, and in turn, II has less than I. There are two exceptions (See Figure 1, Part 2 and 3). There is an excess of intellectual young boys in Density III, and there is an excess of passive older boys in Density II.

Generalization 3.

While it was hypothesized that a simple relationship existed between residential density as we measured it and the relative incidence of our classification of types of boys and girls, no such clear-cut relationship was found. No questions concerning race were asked (although the majority of the city of Washington, D.C. is now non-white). This confounded the homogeneity of our density regions and interfered with the clear cut demonstration that young persons in the farthest reaches of suburbia (Density III) were different in their leisure-time activity-interests from those living in the more citified part of suburbia. Generalization 1 and 2 demonstrate the presence of a gradient from Density I thru II thru III in Washington, D.C. The direction of the gradient is reversed in generalization 2, and this is a matter of socio-economic status. This phenomena generally exists also for Prince Georges County, Montgomery County and the Virginia sample both in boys and in girls: if the direction of the increments of the indices progress in the upper status persons positively from Density II to Density III, the direction of the increments for the lower status persons will be negative from Density II to Density III.

Generalization 4.

This generalization can be displayed in the following manner:

In Prince Georges County High Status Boys the direction of the increments is negative,that is Density Region II's relative frequency is greater than Density Region III.

Exceptions: (1) Young passive boys are in excess in Density III.
(2) Young indeterminate boys are in excess in Density III.

In Prince Georges County Low Status Boys the direction of the increments is positive, that is Density III's relative frequency is greater than Density Region II's.

Exceptions: (1) Older intellectual boys are in excess in Density Region II.
(2) Young and old passive boys are in excess in Density Region II.

In Montgomery County High Status Boys the direction of the increments is positive.

Exceptions: (1) Young intellectual boys are in excess in Density II.
(2) Older passive boys are in excess in Density II.

In Montgomery County Low Status Boys the direction of the increments is negative. There are no exceptions.

In Virginia High Status Boys the direction of the increments is positive.

Exceptions: (1) Young intellectual boys are in excess in Density II.
(2) Young passive boys are in excess in Density II.
(3) Older indeterminate boys are in excess in Density Region II.

In Virginia Low Status Boys the direction of the increments is negative.

Exception: Older passive boys are in excess in Density Region III.

The basic data for boys is resumed in Figure I, parts 1 thru 4 and for girls parts 5 thru 9.

Figure I

Part 1

Boys With High Outdoor Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In boys under 16 yrs.	In boys 16 yrs. or older	In boys under 16 yrs.	In boys 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	No	No
Prince Georges County High S.E. Status			Yes	Yes
Montgomery County High S.E. Status			No	No
Virginia High S.E. Status			No	No
Washington, D.C. Low S.E. Status	Yes	Yes	Yes	Yes
Prince Georges County Low S.E. Status			No	No
Montgomery County Low S.E. Status			Yes	Yes
Virginia Low S.E. Status			Yes	Yes

Part 2

Boys With High Intellectual Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In boys under 16 yrs.	In boys 16 yrs. or older	In boys under 16 yrs.	In boys 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	No	No
Prince Georges County High S.E. Status			Yes	Yes
Montgomery County High S.E. Status			(Yes)	No
Virginia High S.E. Status			(Yes)	No
Washington, D.C. Low S.E. Status	Yes	Yes	(No)	Yes
Prince Georges County Low S.E. Status			No	(Yes)
Montgomery County Low S.E. Status			Yes	Yes
Virginia Low S.E. Status			Yes	Yes

Part 3

Boys With High Passive Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In boys under 16 yrs.	In boys 16 yrs. or older	In boys under 16 yrs.	In boys 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	No	No
Prince Georges County High S.E. Status			(No)	Yes
Montgomery County High S.E. Status			No	(Yes)
Virginia High S.E. Status			(Yes)	No
Washington, D.C. Low S.E. Status	Yes	(No)	Yes	Yes
Prince Georges County Low S.E. Status			(Yes)	(Yes)
Montgomery County Low S.E. Status			Yes	Yes
Virginia Low S.E. Status			Yes	(No)

Part 4

Boys With Indeterminate Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region II	
	In boys under 16 yrs.	In boys 16 yrs. or older	In boys under 16 yrs.	In boys 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	No	No
Prince Georges County High S.E. Status			(No)	Yes
Montgomery County High S.E. Status			No	No
Virginia High S.E. Status			No	(Yes)
Washington, D.C. Low S.E. Status	Yes	Yes	Yes	Yes
Prince Georges County Low S.E. Status			No	No
Montgomery County Low S.E. Status			Yes	Tie
Virginia Low S.E. Status			Yes	Yes

Part 5

Girls With High Dating Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In girls under 16 yrs.	In girls 16 yrs. or older	In girls under 16 yrs.	In girls 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	Tie	No
Prince Georges County High S.E. Status			Yes	Yes
Montgomery County High S.E. Status			Yes	Yes
Virginia High S.E. Status			No	No
Washington, D.C. Low S.E. Status	Yes	Yes	Yes	Yes
Prince Georges County Low S.E. Status			No	No
Montgomery County Low S.E. Status			Yes	Yes
Virginia Low S.E. Status			Yes	(No)

Part 6

Girls With High Outdoor Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In girls under 16 yrs.	In girls 16 yrs. or older	In girls under 16 yrs.	In girls 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	No	No
Prince Georges County High S.E. Status			Yes	Yes
Montgomery County High S.E. Status			(No)	(No)
Virginia High S.E. Status			No	No
Washington, D.C. Low S.E. Status	Yes	Yes	Yes	Yes
Prince Georges County Low S.E. Status			(Yes)	No
Montgomery County Low S.E. Status			Yes	(No)
Virginia Low S.E. Status			Yes	(No)

Part 7

Girls With High Intellectual Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In girls under 16 yrs.	In girls 16 yrs. or older	In girls under 16 yrs.	In girls 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	No	No
Prince Georges County High S.E. Status			Yes	Yes
Montgomery County High S.E. Status			(No)	(No)
Virginia High S.E. Status			(Yes)	(Yes)
Washington, D.C. Low S.E. Status	Yes	Yes	Yes	Yes
Prince Georges County Low S.E. Status			(Yes)	(Yes)
Montgomery County Low S.E. Status			Yes	Yes
Virginia Low S.E. Status			Yes	Yes

Part 8

Girls With Indeterminate Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In Girls under 16 yrs.	In girls 16 yrs or older	In girls under 16 yrs.	In girls 16 yrs. or older
Washington, D.C. High S.E. Status	No	No	No	No
Prince Georges County High S.E. Status			(No)	Yes
Montgomery County High S.E. Status			No	No
Virginia High S.E. Status			No	(Yes)
Washington, D.C. Low S.E. Status	Yes	Yes	Yes	Yes
Prince Georges County Low S.E. Status			No	No
Montgomery County Low S.E. Status			Yes	Tie
Virginia Low. S.E. Status			Yes	Yes

Part 9

Girls With High Altruistic Activity-Interests: Relative frequency of those living in one density region as compared with another:

	Density Region I's relative frequency is greater than Density Region II		Density Region II's relative frequency is greater than Density Region III	
	In girls under 16 yrs.	In girls 16 yrs. or older	In girls under 16 yrs.	In girls 16 yrs. or older
Washington, D.C. High S.E. Status	(Yes)	No	No	No
Prince Georges County High S.E. Status			(No)	Yes
Montgomery County High S.E. Status			Yes	Yes
Virginia High S.E. Status			No	No
Washington, D.C. Low S.E. Status	Yes	Yes	Yes	Yes
Prince Georges County Low S.E. Status			No	No
Montgomery County Low S.E. Status			Yes	(No)
Virginia Low S.E. Status			Yes	Yes

Generalization 5.

The analysis continues for girls in similar manner. In Prince Georges County Upper Status Girls the direction of the increments is negative.

Exceptions
(1) Young altruistic girls are in excess in Density Region III.
(2) Young Indeterminate Girls are in excess in Density Region III.

In Prince Georges County Lower Status Girls the direction of the increments is positive.

Exceptions
(1) Young outdoor girls are in excess in Density Region II.
(2) Young and old intellectual girls are in excess in Density Region II.

In Montgomery County Upper Status Girls the direction of the increments is negative.

Exceptions
(1) Young and Old outdoor girls are in excess in Density II.
(2) Young and Old intellectual girls are in excess in Density II.
(3) Young and Old indeterminate girls are in excess in Density II.

In Montgomery County Lower Status Girls the direction of the increments is contrary to expectation also negative.

Exceptions (1) Older outdoor girls in excess in Density III.
(2) Older altruistic girls in excess in Density III.

In Virginia Upper Status Girls the direction of the increments is positive.

Exceptions (1) Young and older intellectual girls in excess in Density II.
(2) Old indeterminate girls in excess in Density II.

In Virginia Lower Status Girls the direction of the increments is negative.

Exceptions (1) Older outdoor girls are in excess in Density III.
(2) Older Dating Girls are in excess in Density III.

Sheer reliance on the model of a simple gradient from Density Region I thru II thru III was possible for Washington, D. C. However, although this model was useful in the analysis of all of the other counties and cities outside of the District of Columbia, difficulties arose due to the exceptions which were numerous. Density, therefore, has only limited usefulness as an explanatory principle in explaining the variation in the increments of the indices.

An analysis of the direction of the increments between the two socio-economic status groups follows. A Chi Square analysis — one not presented in this report — concerning the effect of density, age, place of residence and socio-economic status on the recreational activity-interest typology has been made.[1]

Such an analysis is however inappropriate until demonstration of the independence of observations is clear. However, as an indication of what such an analysis might be like, Table F is presented suppressing age differentials and place of residence.[2]

We shall, instead, continue, using the Indices of Relative Frequencies using data from Appendix E. Two socio-economic status groupings are compared at a time for the direction of the increments in the index of relative frequency. The symbol U indicates that the index for the "upper" status was larger than for the "lower" status. The symbol L indicates that the index for the "lower" status was larger than for the "upper" status. There were some comparisons which produced no increments; these are labeled T for Tie. Y and O are used to indicate young persons under 16 years of age, and older persons 16 years or more.

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[1] As a class project by students in the writer's statistics courses.

[2] Also a students' class project.

If only the U's are discussed, generalizations concerning the effect of high S. E. status on the typology can be made. Of course, the complement of such a discussion would be generalizations concerning the L's or low status. The question asked is where (in space) as well as for whom is high status associated with a higher relative frequency of the various types of boys and girls. The figures below gives the necessary data; following them is a list of answers or generalizations concerning the inquiry "where (in space) as well as for whom."

Intellectual Boys

	Young and Old			Young			Old		
Density Region:	**I**	**II**	**III**	**I**	**II**	**III**	**I**	**II**	**III**
Washington	L	U	U						
Montgomery		L	U						
Virginia		L	U						
Prince Georges					U	L		L	T
Flint, Michigan					U			L	

1. **For both young and old everywhere in D. C. except in Density I.**
2. **For both young and old in Montgomery and Virginia in Density III.**
3. **For the young in Density II in Prince Georges and Flint, Michigan.**

Outdoor Boys

	Young			Old		
Density Region:	**I**	**II**	**III**	**I**	**II**	**III**
Washington	L	U	U	(L)	U	U
Montgomery		L	L		U	U
Virginia		L	L		T	U
Prince Georges		L	U		(L)	U
Flint, Michigan		L			U	

1. **Everywhere in D. C. except in Density I.**
2. **For older boys everywhere except in Prince Georges County.**
3. **For younger boys in Density III in Washington and in Virginia.**

Passive Boys

	Young			Old		
Density Region:	**I**	**II**	**III**	**I**	**II**	**III**
Washington	L	(U)	U	L	U	U
Montgomery		L	U		(L)	U
Virginia		L	U		U	U
Prince Georges		L	(L)		U	U
Flint, Michigan		L			U	

1. **Everywhere in Density III except in young boys in Prince Georges County.**
2. **For older boys everywhere in Density II except Montgomery.**
3. **Everywhere in D. C. except in Density I.**

Indeterminate Boys

	Young			Old		
Density Region:	I	II	III	I	II	III
Washington	L	(U)	U	L	U	U
Montgomery		L	T		U	U
Virginia		L	U		L	U
Prince Georges		L	(L)		U	U
Flint, Michigan		L			U	

1. Everywhere in D. C. except in Density I.
2. For the young, everywhere in Density III except in Prince Georges County.
3. For the older, everywhere except in Virginia in Density II.

Intellectual Girls

Density Region:	I		II		III	
Age:	Y	O	Y	O	Y	O
Washington	L	L	U	U	U	U
Prince Georges			L	L	U	U
Montgomery			L	L	U	U
Virginia			L	L	U	U
Flint, Michigan			L	U		

1. Everywhere in Washington except in Density I.
2. Everywhere in Density III.
3. In older girls in Flint, Michigan.

Dating Girls

	Young			Old		
Density Region:	I	II	III	I	II	III
Washington	L	U	U	L	U	U
Montgomery		U	U		L	U
Virginia		T	U		L	L
Prince Georges		U	L		U	L
Flint, Michigan		U			L	

1. Everywhere in D. C. except in Density I.
2. In the young everywhere except in Prince Georges County, Density III.
3. In older girls in Prince Georges County Density II.
4. In older girls in Montgomery Density III.

Altruistic Girls

	Young			Old		
Density Region:	I	II	III	I	II	III
Washington	L	U	U	L	U	U
Montgomery		L	U		U	L
Virginia		L	U		L	L
Prince Georges		U	L		U	L
Flint, Michigan		L			U	

1. Everywhere in Washington except in Density I.
2. For the young in Density II everywhere except in Prince Georges County.
3. For the young in Density II in Prince Georges County.
4. For the older in Density II everywhere except in Virginia.

Outdoor Girls

	Young			Old		
Density Region:	I	II	III	I	II	III
Washington	L	U	U	L	U	U
Prince Georges		L	(L)		U	(L)
Montgomery		L	U		L	L
Virginia		L	U		L	L
Flint, Michigan		L			U	

1. Everywhere in Washington except Density I.
2. Everywhere else in the young in Density III except Prince Georges County.
3. In older girls in Density II except in Virginia and Montgomery County.

Indeterminate Girls

	Young			Old		
Density Region:	I	II	III	I	II	III
Washington	L	U	U	L	U	U
Prince Georges		U	L		U	L
Montgomery		L	U		L	U
Virginia		L	U		L	L
Flint, Michigan		L			U	

1. Everywhere in Washington except Density I.
2. In older girls of Montgomery County, Density III.
3. Everywhere in older girls of Density II except Montgomery County and Virginia.
4. In younger girls in Density II in Prince Georges County.
5. In younger girls everywhere in Density III except Prince Georges County.

Abstention from "pouring meaning" into the descriptive analysis in this preliminary first report is wise counsel until the basic step of verifying the constancy of the items within scores on the entire universe or a representative random sample of it has been done. Due to circumstances beyond the writer's control it was not possible to wait until the entire universe of cases was initially processed, to engage in procedures which further investigated the constancy and reliability of items in the various scores. Nor was it possible, at this time (although we have the basic tables) to investigate the constancy and reliability of the classification system of boys and girls which we constructed from the first five thousand cases that came in. An expensive sight-editing procedure delayed data-processing. Furthermore, the machine-editing of unreliable data (and its rejection) which we did do, seemed the most conservative policy before definitive work on item-analysis and "motive" clustering in the entire universe was engaged in. There were, regretably, no funds left for this necessary work. The author, however, has instituted work privately for this urgent research-design so that generalizations with appropriate tests of statistical significance levels in both parametric and non-parametric distributions of phenomena will be forthcoming.

This descriptive analysis of recreational activity-interests in teen-agers has indicated that sex, age, place of residence, socio-economic status and residential density all contribute to the variation in the relative frequency of a typology of youth. No evaluations of any type of youth—be it Outdoor, Intellectual, Passive, Dating or Altruistic—according to desirability has been made nor does the author intend that any such evaluations be inferred at this stage of the research.

A second endeavor somewhat independent of this report has been directed towards presenting a fact book to individual school systems. Some data processed by the Sociology Department has been used by the Health and Welfare Council of Washington, D.C. to produce the following volumes:

University of Maryland, Survey of Leisure Activities and Interests of Teen-Age Youth in the Washington Metropolitan Area —

Part A - Metropolitan, County and City totals (54 pages)
Part B - Metropolitan, County, City and 65 study area totals (not by sex and age groups) (54 pages)
Part C - District of Columbia and its 20 study areas (162 pages)
Part D - Montgomery County and its 12 study areas (108 pages)
Part E - Prince Georges County and its 13 study areas (108 pages)
Part F - Fairfax County - 9 study areas; Alexandria (sample) - 3 study areas; Falls Church - 1 study area (108 pages)
Part G - Arlington County and its 7 study areas (54 pages)
Part H - Seventh and Eighth Grade Students (sample) - Metropolitan, County and City totals (54 pages)
Part I - Metropolitan totals and comparative totals for four socio-economic groupings of the 65 study areas; parochial and independent schools totals (sample); "contrasting" city totals (54 pages)

The author wishes to express his gratitude to Mr. James R. Chaillet, Chief of Tabulating Division, William J. Tsikerdanos, Supervisor of Machine Records, Edward E. Wheeler, Tabulating Machine Operator, Leslie Crockett, John A. Seibel, Tabulating Machine Operators, all of the Tabulating Division of the Comptroller's office, University of Maryland for technical assistance in the IBM data processing of this study.

Addendum to Page 24

A paragraph has been left out coming before "Rules were constructed—"

Add:

This procedure was improved upon by taking into account degrees of freedom and the fact of mutual independence of choices. Consider for example two hundred persons who picked benefit "one" but also picked some of the remaining twenty benefits. If four hundred and eighty benefits were picked by these two hundred persons, the theoretical number of instances any particular benefit was picked by the group if all twenty benefits were equally related would be 480/20 or 24. If we chose 3.84 as our significant Chi Square at the .05 with one degree of freedom, then

$$3.84 = \frac{(\text{Theoretical minus observed})^2}{\text{Theoretical Frequency}}$$

Or, $3.84 = \frac{\text{diff}}{24}^{2} = 92.16$ and the necessary size of the difference of the theoretical from the observed is the square root of 92.16 or 9.6. Therefore, all frequencies of benefits in this particular row of benefits in the matrix which are greater than twenty four plus nine, that is thirty three, or smaller than twenty four minus nine, that is fifteen are to be noted as having a relationship (minus or positive) to the two hundred persons who picked benefit "one".

The second row in the matrix is similarly analyzed but now we consider not twenty remaining benefits but only nineteen. Each row is independently analyzed for "goodness of fit" before the next row is analyzed. When all signs of direction and degrees of fiducial level are recorded, it is then appropriate to reclassify the cells in the matrix into clusters having similar sign interrelations.

Alternative statistical procedures were considered. They were (1) factor analysis, rejected because of difficulty with cutting points near the median for a tetrachoric r or phi. (2) analysis of variance or covariance rejected because of twenty one variables in the matrix.

APPENDIX A

Youth Survey of Spare Time

QUESTION BOOKLET

You are to show what you do in your spare time and what you want to do by circling the proper codes. Follow instruction in heavy type carefully. You may use either pen or pencil. If you change your mind or make a mistake, cross out the wrong code. Do not try to erase.

Count only your spare time unless otherwise directed. This is the time in which you are free to do what you want to do rather than what you must do. It is the time when you are not working for pay, going to school, doing homework, or travelling to and from work or school.

If you cannot remember how many hours you did something during the past year, it is all right to make a guess. The past year means the 12 months ending the day you take this quiz.

1. Circle the code on the left for activities done in your spare time three or more hours during the past year:

go horseback riding; go exploring; go skiing on snow; go for rides on excursion boats or short boat cruises; go water skiing or aquaplaning; help usher, or serve dinners, in a church, or club; volunteer to paint, type, etc., for a church or club; collect money, or sell something for a good cause; help with a children's group or help teach them; volunteer to serve as a nurse's or hospital aide; visit art galleries, museums, planetariums, etc.; go sightseeing or visit historical places; go to classical concerts or recitals; go on outings to amusement parks; take regular exercises or lift weights; take part in boxing, wrestling, fencing or judo; play softball; play volley ball, soccer or field hockey; play badminton; take part in cheer leading or baton twirling; go bowling.

2. Circle the code on the left for activities done in your spare time 12 or more hours during the past year:

play golf; play miniature golf; play ping pong or table tennis; play tennis; go on camping trips for overnight or longer; go fishing or hunting; go hiking out in the open for a half day or more; go on short trips in a car; go drag strip racing, motorcycle or car racing; roller or ice skate at rinks; go bicycling; go canoeing or boating (without motor or sail); go motorboating (inboard or outboard); act in plays or help put on plays; sing in a chorus, choir, glee club, etc.; paint or draw pictures; design something such as a dress, model plane, car, etc.; cook or bake something special; sew, knit, etc., build, repair or maintain cars or boats; collect stamps, records, pictures, coins, etc.; make models of something; take part in a hobby such as photography, radio or fixing up TV's, hi-fi's, rockets, telescopes, etc.; woodworking; browse around in libraries or bookstores; write plays, poems, stories, etc. (not school work); take part in discussion groups with special leaders on civic affairs, careers, health, etc.; learn foreign languages (outside of school); work puzzles; go to plays (legitimate theater); play chess; give parties for friends; go to picnics; go walking in parks, woods, along trails, etc.

3. Circle the code on the left for activities done in your spare time eight hours or more per month on the average during the past year (or a total of over about 100 hours per year):

go swimming; play musical instruments; travel widely in the U.S.A. or in foreign countries; read interesting and worthwhile books; ride around in cars for fun rather than to get somewhere; go to meetings of clubs and organizations; go to parties, "pot-lucks", socials, hayrides, etc.; attend church, Sunday school, or other religious activities; watch movies (other than on TV); watch sports events (other than on TV or in movies).

4. Circle the code on the left for activities done in your spare time four hours or more per week on the average during the past year (that is, more than 16 hours per month or over 200 hours per year):

play major sports such as baseball, basketball, football or track; homework or study for school courses (outside of school); play games such as cards, checkers, dominoes, etc.; go dancing; go out on dates; have fun with your family (parents, brother or sister); talk and joke with friends and acquaintances; just rest or relax or do nothing; read for fun or to pass the time away; listen to popular music on radio, phonograph or tape; listen to classical music on radio, phonograph or tape; watch TV.

5. Now go back .... and circle 20 codes on the right to show what you would like to do most or do more often in your spare time - if nothing prevented you. Circle 20 of the codes between .... and ....

go horseback riding; go exploring; go skiing on snow; go for rides on excursion boats or short boat cruises; go water skiing or aquaplaning; help usher, or serve dinners, in a church, or club; volunteer to paint, type, etc., for a church, or club; collect money, or sell something for a good cause; help with a children's group or help teach them; volunteer to serve as a nurse's or hospital aide; visit art galleries, museums, planetariums, etc.; go sightseeing or visit historical places; go to classical concerts or recitals; go on outings to amusement parks; take regular exercises or lift weights; take part in boxing, wrestling, fencing or judo; play softball; play volley ball, soccer or field hockey; play badminton; take part in cheer leading or baton twirling; go bowling; play golf; play miniature golf; play ping pong or table tennis; play tennis; go on camping trips for overnight or longer; go fishing or hunting; go hiking out in the open for a half day or more; go on short trips in a car; go drag strip racing, motorcycle or car racing; roller or ice skate at rinks; go bicycling; go canoeing or boating (without motor or sail); go motorboating (inboard or outboard); act in plays or help put on plays; sing in a chorus, choir, glee club, etc.; paint or draw pictures; design something such as a dress, model plane, car, etc.; cook or bake something special; sew, knit, etc.; build, repair or maintain cars or boats; collect stamps, records, pictures, coins, etc.; make models of something; take part in a hobby such as photography, radio or fixing up TV's, hi-fi's, rockets, telescopes, etc.; woodworking; browse around in libraries or bookstores; write plays, poems, stories, etc. (not school work); take part in discussion groups with special leaders on civic affairs, careers, health, etc.; learn foreign languages (outside of school); work puzzles; go to plays (legitimate theater); play chess; give parties for friends; go to picnics; go walking in parks, woods, along trails, etc.; go swimming; play musical instruments; travel widely in the U.S.A. or in foreign countries; read interesting and worthwhile books; ride around in cars for fun rather than to get somewhere; go to meetings of clubs and organizations; go to parties, "pot-lucks", socials, hayrides, etc.; attend church, Sunday school, or other religious activities; watch movies (other than on TV); watch sports events (other than on TV or in movies); play major sports such as baseball, basketball, football or track; homework or study for school courses (outside of school); play games such as cards, checkers, dominoes, etc.; go dancing; go out on dates; have fun with your family (parents, brother or sister); talk and joke with friends and acquaintances; just rest and relax or do nothing; read for fun or to pass the time away; listen to popular music on radio, phonograph or tape; listen to classical music on radio, phonograph or tape; watch TV.

6. Read over this list of benefits which young people often receive from their use of spare time. Circle 6 codes to show which benefits are most important to you:

get physical exercise; meet new people; broaden my outlook on life; get self-confidence; have adventure, excitement or risk; design or make something which is beautiful or useful; be outdoors; help a particular person, family, group, or community; do something new and different; feel rhythm or beat; be amused or entertained; just be with my friends; get away from people and have some peace and quiet; find out what to believe, what's the right way to live or how to behave towards others; get knowledge or use my mind; do something which will make others like me or admire me; just be with my family (parents, brothers and sisters); do something competitive or challenging; rest, relax, take it easy, or be comfortable; develop new skills and abilities; be with a person of the opposite sex or get to meet and know such persons.

7. Circle the code for each kind of place to which you went more than five times during the past year for spare time activities. Count only the times you went after school hours for recreational or spare time activities:

a recreation center or community center operated by a public or governmental agency; a settlement or neighborhood house operated by a voluntary (private) agency or church; a public school (count only if used after school); a private or parochial school (only after school); a church or synagogue (don't count church services or other religious activities); a fire house (when used for spare time activities); a Jewish Community Center or Y.M.H.A. building; a Y.M.C.A. building; a Y.W.C.A. building; a country club; a boys' club building; a police boys' club building; a Salvation Army building.

8. Circle the code for each type of group to which you belonged during the past year. (Do not count any groups you attended less than 3 times during the year):

church youth group such as teen club Temple Youth, CYO, Youth Fellowship (do not count Sunday school classes or groups with a religious purpose primarily); small clubs or youth groups located in a Y.M.C.A., Boys' Club, Recreation Center, etc.; student council, or student government at a school; school science, mathematics, language, or literary club (count only those meeting after school hours); school newspaper, magazine or annual; hobby club such as Fan Club, Hot Rod Club, Radio Club, etc.; band, orchestra, glee club, choir, etc.; athletic or sports club other than team; scouts, explorers, Hi-Y, Camp Fire Girls, 4-H, B'nai B'rith, Tri-Hi-Y, etc.; fraternity, sorority, or exclusive social club; dramatics group producing theatricals; fraternal organizations and lodges (Masonic Order, De Molay, Job's Daughters, Elks, etc.); other.

9. Circle 1 code on left to show how many groups such as the above you belonged to during the past year (do not count athletic teams):

none; one or two groups; three to five groups; six or more groups.

10. Circle 1 code on right above to show how many athletic or sports teams (other than groups reported on left) you belonged to during the past year:

none; one or two groups; three to five groups; six or more groups.

11. Suppose that you received $300 to spend as you pleased. Circle 2 codes to show what you would be most likely to do with the $300:

buy a car, or help pay expenses on a car; save it to help pay educational expenses after high school; buy necessities for use right now (clothes, food, etc.); buy hobby equipment such as tools, camera, boat, etc.; save it to help pay vacation expenses; spend it on fun and pleasure; other.

12. Circle 1 code to show type of course you are taking:

college preparatory or academic; business, commercial, trade, or vocational; general, not college preparatory or vocational; other.

13. Circle 1 code to show your plans for your future:

leave school as soon as possible; finish high school; get more education after high school but less than four years of college; graduate from a four-year college course; get a professional or graduate degree after finishing college.

14. Circle 1 code to show your parents' schooling:

neither of my parents finished high school; one of my parents finished high school but not the other; both parents finished high school but neither finished college; one of my parents finished four years of college but not the other; both of my parents finished four years of college.

15. Circle 1 code for each of the kinds of organizations in which either your father or mother have been active during the past 3 years:

they haven't been active in an organization during the past three years; Parent-Teacher Association (PTA), citizens or civic association, improvement association; political group or organization, labor union, consumer cooperative, etc.; church or religious organization; professional association, college alumni club, service club or business association; scouting or other youth organization (volunteer leader); Veteran's organization such as the American Legion, VFW; social club, fraternal, sports, or sewing club; dramatics, arts and crafts, music or study group.

16. Circle 2 codes to show how you usually travel to get to your spare time activities:

I hitch rides; I drive my own car or the family car; I ride my bicycle; I use public transportation (bus or street car); someone in the family drives me there in our car; a friend drives me there in a car; I walk; other.

17. Circle 2 codes to show with whom you usually go on out-of-town trips (count only trips to places more than 40 miles away):

family (parents, brothers, or sisters); other relatives; other adults to whom you are not related; friends about my own age; a group such as a church group, club or youth organization; usually go alone; I don't go on out-of-town trips.

18. Circle the code for each question to which your answer is yes:

Are your school grades usually below those of most of your classmates? Are your school grades usually above those of most of your classmates? Have you ever repeated a grade in school? Have you ever skipped a grade in school? Are there more than five persons living together in your family? (related persons living together) Do you live with both your father and mother? (count stepfather or stepmother) Do you have two or more brothers and sisters under 18 living with you at home? Does your family have an automobile? Do you have an automobile of your own? If you do not have a car of your own, can you usually get the use of a family car to get to your spare time activities? Do you have a telephone in your home? Do you have a television set in your home? Is any part of your home cooled by some kind of machinery other than a fan? Does your family have two or more automobiles? Do you have a room of your own? Does your home have a recreation room other than living or dining room? Is there an electric dishwasher in your home? Is your family renting their home or apartment? Is your family living in a building in which there are one or more other families living in separate quarters? Has your family lived in this neighborhood for less than five years? Has your family lived in or near this city, metropolitan area or county for less than five years? Does your mother work more than 30 hours per week for pay? Does your family subscribe to three or more weekly or monthly magazines? Are there more than 50 books in your home? Have you borrowed more than 10 books from a public library during the past year? Can you play the piano? Can you play any other musical instrument? (such as a violin, guitar, trombone, etc.) Have you attended any organized summer camps for at least two summers? Last summer was it hard for you to find enough to do in your spare time? During the past year was it hard for you to find enough to do in your spare time? Last summer did you work for pay more than 10 hours per week on the average? During the past school year did you work for pay more than five hours per week on the average? Are you an officer or committee chairman of any club or group? Do you want to spend more time in club or group activities with other young people? Do you feel that you have some physical handicap which prevents you from doing certain kinds of activities in your spare time? Most of the time do you prefer to have fun (movies, trips, picnics, swimming, etc.) with your family rather than with your friends? Are there more than four young people in your circle of friends with whom you have fun about once a month or oftener? Do you get together with your friends oftener than twice a month to talk, listen to records, radio, TV or do other things together for fun? Do you spend more than two dollars ($2.00) per week on the average for your recreation and spare time activities?

19. Circle 3 codes to show which 3 occupations are most like what you believe you will actually be doing for a living when you are about 30 years old. If you are a girl, answer according to what you expect your future husband will be doing for a living:

banker; janitor; lawyer; barber; teacher; policeman; minister; bookkeeper; coal miner; truck driver; physician; electrician; civil engineer; carpenter; gas station man; captain in army; radio announcer; elevator operator; auto mechanic; owner of factory employing 100 men.

20. Circle 6 codes to show which activities are most like the things you usually do to broaden your outlook on life:

act in plays or help put on plays; play musical instruments; sing in a chorus, choir, glee club, etc.; paint or draw pictures; cook or bake something special; sew, knit, etc.; build, repair or maintain cars or boats; collect stamps, records, pictures, coins, etc.; take part in a hobby such as photography, radio, fixing TV's, hi-fi's, rockets, telescopes, etc.; help usher, serve dinners, or act as host or hostess in a church, club or canteen; help with a children's group or help teach them; volunteer to serve as a nurse's or hospital aide; visit art galleries, museums, planetariums, etc.; travel widely in the U.S.A. or in foreign countries; browse around in libraries or bookstores; write plays, poems, stories, etc. (not for school work); go to classical concerts or recitals; take part in discussion groups with special leaders on civic affairs, careers, health, etc.; learn foreign languages (outside of school); read interesting and worthwhile books; go to plays (legitimate theater); woodworking; play chess; go to meetings of clubs and organizations.

21. Circle 6 codes to show which activities are most like the things you usually do to develop new skills and abilities:

22. Circle 6 codes to show which activities are most like the things you usually do to help a particular person, family, group or community:

23. Circle 6 codes to show which activities are most like the things you usually do to get knowledge or use your mind:

24. Circle 6 codes to show which activities are most like the things you usually do to design or make something beautiful or useful:

The list in question 20 is also used for questions 21, 22, 23, 24.

25. Circle 6 codes to show which activities are most like the things you usually do to meet new people:

go hiking out in the open for a half day or more; go on short trips in a car; roller or ice skate at rinks; go for rides on excursion boats or short boat cruises; go canoeing or boating (without motor or sail); go motor boating (inboard or outboard); go swimming; go sightseeing or visit historical places; play games such as cards, checkers, dominoes, etc.; give parties for friends; go to picnics; go walking in parks, woods, along trails, etc.; attend church, Sunday school, or any other religious activities; ride around in cars for fun rather than to get somewhere; go to meetings of clubs and organizations; go dancing; go out on dates; go to parties, "pot-lucks"; socials, hayrides, etc.; talk and joke with friends and acquaintances; go on outings to amusement parks; watch movies (other than on TV); listen to popular music on radio, phonograph or tape; watch sports events (other than on TV or in movies); watch TV.

The list in question 25 is also used for questions 26, 27, 28, 29, and 30.

26. Circle 6 codes to show which activities are most like the things you usually do to just be with your friends:

27. Circle 6 codes to show which activities are most like the things you usually do to be with a person of the opposite sex or get to meet and know such persons:

28. Circle 6 codes to show which activities are most like the things you usually do to feel rhythm or beat:

29. Circle 6 codes to show which activities are most like the things you usually do to be amused or entertained:

30. Circle 6 codes to show which activities are most like the things you usually do to rest, relax, take it easy, or be comfortable:

31. Circle 6 codes to show which activities are most like the things you usually do to just be with your family:

take part in boxing, wrestling, fencing, or judo; play volley ball, soccer or field hockey; play golf; go on camping trips for overnight or longer; go exploring; go horseback riding; go skiing on snow; go hiking out in the open for a half day or more; go drag strip racing, motorcycle or car racing; go canoeing or boating (without motor or sail); go water skiing or aquaplaning; go swimming; travel widely in the U.S.A. or in foreign countries; take part in discussion groups with special leaders on civic affairs, careers, health, etc.; go to picnics; go walking in parks, woods, along trails, etc.; ride around in cars for fun rather than to get somewhere; go dancing; go out on dates; go to parties, "pot-lucks", socials, hayrides, etc.; go on outings to amusement parks; watch movies (other than on TV); watch sports events (other than on TV or in movies); watch TV.

The list in question 31 is also used in questions 32, 33, and 34.

32. Circle 6 codes to show which activities are most like the things you usually do to be outdoors:

33. Circle 6 codes to show which activities are most like the things you usually do to have adventure, excitement, or risk:

34. Circle 6 codes to show which activities are most like the things you usually do when you want to do something new and different:

35. Circle 6 codes to show which activities are most like the things you usually do to get physical exercise:

play major sports such as baseball, basketball, football or track; take part in boxing, wrestling, fencing or judo; play softball; play volley ball, soccer or field hockey; take part in cheer leading or baton twirling; go bowling; play miniature golf.; play ping pong or table tennis; go on camping trips for overnight or longer; go fishing or hunting; go skiing on snow; go drag strip racing, motorcycle or car racing; go bicycling; go canoeing or boating (without motor or sail); go water skiing or aquaplaning; act in plays or help put on plays; sing in a chorus, choir, glee club, etc.; collect stamps, records, pictures, coins, etc.; take part in discussion groups with special leaders on civic affairs, careers, health, etc.; learn foreign languages (outside of school); play chess; give parties for friends; go out on dates; go on outings to amusement parks.

The list in question 35 is used in questions 36, 37, and 38.

36. Circle 6 codes to show which activities are most like the things you usually do to get self-confidence.

37. Circle 6 codes to show which activities are most like the things you usually do which are competitive or challenging:

38. Circle 6 codes to show which activities are most like the things you usually do to make others like or admire you:

39. Circle 6 codes to show which activities are most like the things you usually do to find out what to believe, what's the right way to live, or how to behave towards others:

play tennis; go fishing or hunting; go hiking out in the open for a half day or more; go on short trips in a car; go motorboating (inboard or outboard); paint or draw pictures; cook or bake something special; sew, knit, etc.; build, repair or maintain cars or boats; collect stamps, records, pictures, coins, etc.; make models of something; take part in a hobby such as photography, radio, fixing TV's, hi-fi's, rockets, telescopes, etc.; woodworking; learn foreign languages (outside of school); read interesting and worthwhile books; homework or study for school courses (outside of school); go walking in parks, woods, along trails, etc.; attend church, Sunday school, or other religious activities; have fun with your family (parents, brother or sister); read for fun or to pass the time away; watch movies (other than on TV); listen to popular music on radio, phonograph or tape; watch TV.

The list in question 39 is used also in question 40.

40. Circle 6 codes to show which activities are most like the things you usually do when you want to get away from people and have some peace and quiet:

41. Circle the code for each kind of special instruction you have been getting during the past year, outside of regular school:

none; music lessons, tutoring or other school on regular school subjects; dancing; art, painting or drawing; radio or electronics; religion; roller skating or ice skating; modelling; driving; typing and shorthand; sewing; other.

42. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

go exploring; go horseback riding; go mountain climbing; go rock climbing (scaling cliffs using special equipment); go skiing on snow; take part in ice hockey; go for rides on excursion boats or short boat cruises; go canoeing in rough water (white water canoeing); go canoeing in calm water (without sail or motor); go rowing or row boating (without motor); go water skiing or aquaplaning; do skin diving or scuba (swimming under water with oxygen tank for breathing); go sightseeing or visit historical places; browse around in libraries or bookstores; play badminton; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; play ping pong or table tennis; watch TV; roller or ice skate at rinks; talk and joke with friends and acquaintances.

43. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

go sledding or tobogganing; go on nature or bird walks with an informed person; go to jazz or popular music concerts; go to classical concerts or recitals; take part in debates or give speeches; go to lectures or debates; take part in nature study (birds, flowers, animals, microscopic life,etc.); take lessons or practice modern dance, ballet, tap, folk or square dancing; go on outings to amusement parks; volunteer to paint, clean, type, etc., for a church or agency; volunteer to serve as a nurse's or hospital aide; collect old papers, or sell something for a worthy cause; help with a children's group or help teach them; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; browse around in libraries or bookstores; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; play ping pong or table tennis; play badminton; watch TV; roller or ice skate at rinks; go horseback riding.

44. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you

[illegible] part in tumbling, gymnastics or acrobatics; rifle, pistol and shot gun shooting and target practice (other than hunting); play softball; play volley ball, soccer or field hockey; take part in archery; go bowling; play croquet; play golf; play miniature golf; play horseshoes or quoits; play badminton; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; browse around in libraries or bookstores; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; play ping pong or table tennis; watch TV; roller or ice skate at rinks; go horseback riding.

45. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

take part in boxing; take part in fencing; take part in judo; play badminton; take regular exercises or lift weights to keep trim; take part in wrestling; take part in field hockey; play soccer; play volley ball; take part in cheer leading or baton twirling; play ping pong or table tennis; play tennis; go bicycling; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; browse around in libraries or bookstores; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; watch TV; roller or ice skate at rinks; go horseback riding; talk and joke with friends and acquaintances; play games such as cards, chess, checkers, dominoes, etc.

46. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

go fishing or hunting; go canoeing or boating (without motor or sail); go walking around town; go walking in parks, woods, along trails, etc.; go hiking out in the open for a half day or more; go hitch hiking for several hundred miles; go swimming in an indoor pool; go swimming in an outdoor pool; go swimming elsewhere than in a pool (beach, river, lake, ocean, etc.); roller or ice skate at rinks; give parties for friends; have a family reunion or holiday celebration at home; visit at homes of friends or relatives with someone from your family; play badminton; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; browse around in libraries or bookstores; ride around

47. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

go to picnics; go on camping trips (for overnight or longer); go fishing, fly casting, etc.; go hunting; go on short trips in a car; go drag strip racing, motorcycle or car racing; go on motorcycle or motor scooter rides; go roller skating; go ice skating; go motorboating (inboard or outboard); go sailing; take responsibility for the care and training of a pet such as a dog, cat, etc.; visit art galleries, museums, planetariums, etc.; play badminton; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; browse around in libraries or bookstores; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; play ping pong or table tennis; watch TV; go horseback riding; talk and joke with friends and acquaintances.

48. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

act in plays or help put on plays; play in a band, orchestra or other instrumental music group; sing in a chorus, choir, glee club, etc.; beauty culture (do not count going to barber shop or beauty parlor); ceramics, work in clay, or sculpture; paint or draw pictures; design something such as a dress, model plane, car, etc.; sew, knit, etc.; build, repair, or maintain cars or boats; make or repair something electronic (radio, TV, tape recorder, etc.); photography as a hobby; build a telescope or make a rocket; collect stamps, records, pictures, coins, etc.; play badminton; go hiking out in the open for a half day or more; browse around in libraries or bookstores; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; play ping pong or table tennis; watch TV; roller or ice skate at rinks; go horseback riding; talk and joke with friends and acquaintances; play games such as cards, chess, checkers, dominoes, etc.

49. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

cook or bake something special; build, repair or maintain boats; repair or tinker with cars, rebuild or [illegible]

play badminton; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; play ping pong or table tennis; watch TV; roller or ice skate at rinks; go horseback riding; talk and joke with friends and acquaintances.

50. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

take part in discussion groups with special leaders on civic affairs, careers, health, etc.; regularly watch an educational TV course in a language or science; learn foreign languages (outside of school); work puzzles; do scientific experiments; read books on science or mathematics; go to plays (legitimate theater); write plays, poems, stories, etc. (not school work); write to "pen-pals" in foreign countries; write letters (other than to "pen-pals"); play chess; help entertain friends or relatives in your home; decorate your room or help decorate your home; play badminton; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; browse around in libraries or bookstores; ride around in cars for fun rather than to get somewhere; just rest and relax or do nothing; play ping pong or table tennis; watch TV; roller or ice skate at rinks; go horseback riding.

51. Circle 6 codes to show which of this special list of 24 activities you would like to do most or do more often in your spare time, if nothing prevented you:

play baseball (hardball); play football; travel widely in the U.S.A. or in foreign countries;go swimming; play musical instruments; read interesting and worthwhile books; ride around in cars for fun rather than to get somewhere; go to meetings of clubs and organizations; go to parties, "pot lucks", socials, hayrides, etc.; attend church, Sunday school, or other religious activities; watch movies (other than on TV); watch sports events (other than on TV or in movies);
play major sports such as baseball, basketball, football, or track;
homework or study for school courses (outside of school); play
games such as cards, checkers, dominoes, etc.; go dancing; go out
on dates; talk with friends over the telephone; talk and joke with
friends and acquaintances; have fun with your family (parents,
brother or sister); just rest and relax or do nothing; read for fun
or to pass the time away; listen to popular music on radio, phonograph,

or tape; listen to classical music on radio, phonograph, or tape; watch TV; play badminton; go hiking out in the open for a half day or more; sing in a chorus, choir, glee club, etc.; design something such as a dress, model plane, car, etc.; browse around in libraries or bookstores; ride around in cars for fun rather than to get somewhere; play ping pong or table tennis; roller or ice skate at rinks; go horseback riding; go sightseeing or visit historical places; go to picnics.

53. Circle code on left side for each type of trip or outing you took in the past year:

sports car tour; voyage on a ship for a distance of at least 100 miles; airplane trip for a distance of at least 100 miles; excursion boat; amusement park; county or state fair; race track or the races (other than at a fair); airport (other than when taking a plane trip or when meeting someone on a trip); art museum or art gallery; visit historical places; sightseeing - other than to historical places; science or natural history museum, planetarium or aquarium; an exhibition, flower show, auto show, dog show, horse show, home show, etc.

54. Circle 3 codes on the right side to show which 3 of the above kinds of trips you would most like to take or take more often if nothing prevented you:

sports car tour; voyage on a ship for a distance of at least 100 miles; airplane trip for a distance of at least 100 miles; excursion boat; amusement park; county or state fair;

---

day; every day; several times a day.

56. Circle 1 code to show about how many young people there are in your circle of friends with whom you have fun about once a month or oftener:

none; 1 or 2; 3 to 5; 6 to 10; 11 to 20; 21 to 40; 41 to 80; 81 or more.

57. Circle 1 code to show about how much money you get each week on the average from all sources (such as parents, your earnings, etc.):

less than 50¢; 50¢ to 99¢; $1.00 to $1.49; $1.50 to $1.99; $2.00 to $2.49; $2.50 to $2.99; $3.00 to $3.99; $4.00 to $4.99; $5.00 to $5.99; $6.00 to $6.99; $7.00 to $7.99; $8.00 to $8.99; $9.00 to $9.99; $10.00 to $14.99; $15.00 to $19.99; $20.00 or more.

58. Circle the code for each of the ways in which you use your money:

personal necessities (clothes, lunches, school supplies, etc.); help pay for family expenses (food, rent, bills, etc.); recreation activities and entertainment (movies, snacks, tobacco, books, car, etc.); save for future education; save for other purposes.

59. Circle 1 code to show about how much money you usually spend each week on your recreation and spare time activities:

less than 50¢; 50¢ to 99¢; $1.00 to $1.49; $1.50 to $1.99; $2.00 to $2.49; $2.50 to $2.99; $3.00 to $3.99; $4.00 to $4.99; $5.00 to $5.99; $6.00 to $6.99; $7.00 to $7.99; $8.00 to $8.99; $9.00 to $9.99; $10.00 or more.

60. Circle 1 code on each line to show about how many hours you did the activity in your spare time during the past year; (categories: not done; 1 or 2 hours; 3 to 5 hours; 6 to 11 hours; 12 to 23 hours; 24 or more hours):

go exploring; go horseback riding; go mountain climbing; go rock
go sledding or tobogganing; go on nature or bird walks with an informed person; go to jazz or popular music concerts; go to classical concerts or recitals; take part in debates or give speeches; go to lectures or debates; take part in nature study (birds, flowers, animals, microscopic life, etc.); take lessons or practice modern

dance, ballet, tap, folk or square dancing; go on outings to amusement parks; volunteer to paint, clean, type, etc., for a church or agency; volunteer to serve as a nurse's or hospital aide; collect old papers, or sell something for a worthy cause; help with a children's group or help teach them.

62. Circle 1 code on each line to show about how many hours you did the activity in your spare time during the past year (categories: not done; 1 to 5 hours; 6 to 11 hours; 12 to 23 hours; 24 to 47 hours; 48 or more hours):

play basketball; go out for track and field events (running, jumping, throwing, etc.); take part in boxing, wrestling, fencing or judo; take part in tumbling, gymnastics or acrobatics; rifle, pistol and shot gun shooting and target practice (other than hunting); play softball; play volley ball, soccer or field hockey; take part in archery; go bowling; play croquet; play golf; play miniature golf; play horseshoes or quoits.

63. Circle 1 code on each line to show about how many hours you did the activity in your spare time during the past year; (categories: not done, 1 to 5 hours; 6 to 11 hours; 12 to 23 hours; 24 to 47 hours; 48 or more hours):

take part in boxing; take part in fencing; take part in judo; play badminton; take regular exercise or lift weights to keep trim; take part in wrestling; take part in field hockey; play soccer; play volley ball; take part in cheer leading or baton twirling; play ping pong or table tennis; play tennis; go bicycling.

iver, lake, ocean, etc.); roller or ice skate at rinks; give parties for friends; have a family reunion or holiday celebration at home; visit at homes of friends or relatives with someone from your family.

65. Circle 1 code on each line to show about how many hours you did the activity in your spare time during the past year; (categories: not done; 1 to 5 hours; 6 to 11 hours; 12 to 23 hours; 24 to 47 hours; 48 or more hours):

go to picnics; go on camping trips (for overnight or longer); go fishing, fly casting, etc.; go hunting; go on short trips in a car; go drag strip racing, motorcycle or car racing; go on motorcycle or motor scooter rides; go roller skating; go ice skating; go motorboating (inboard or outboard); go sailing; take responsibility for the care and training of a pet such as a dog, cat, etc.; visit art galleries, museums, planetariums, etc.

66. Circle 1 code on each line to show about how many hours you did the activity in your spare time during the past year; (categories: not done; 1 to 5 hours; 6 to 11 hours; 12 to 23 hours; 24 to 47 hours; 48 or more hours):

act in plays or help put on plays; play in a band, orchestra or other instrumental music group; sing in a chorus, choir, glee club, etc.; beauty culture (do not count going to barber shop or beauty parlor); ceramics, work in clay, or sculpture; paint or draw pictures; design something such as a dress, model plane, car, etc.; sew, knit, etc.; build, repair, or maintain cars or boats; make or repair something electronic (radio, TV, tape recorder, etc.); photography as a hobby; build a telescope or make a rocket; collect stamps, records, pictures, coins, etc.

67. Circle 1 code on each line to show about how many hours you did the activity in your spare time during the past year; (categories: not done; 1 to 5 hours; 6 to 11 hours; 12 to 23 hours; 24 to 47 hours; 48 or more hours):

cook or bake something special; build, repair or maintain boats; repair or tinker with cars; rebuild or "customize" cars; collect stamps, [illegible] collect phonograph records or

68. Circle 1 code on each line [illegible]
in your spare time during the past year; (categories: not done; 1 to 5 hours; 6 to 11 hours; 12 to 23 hours; 24 to 47 hours; 48 or more hours):

take part in discussion groups with special leaders on civic affairs, careers, health, etc.; regularly watch an educational TV course in a language or science; learn foreign languages (outside of school); work puzzles; do scientific experiments; read books on science or mathematics; go to plays (legitimate theater); write plays, poems, stories, etc. (not school work); write to "pen-pals" in foreign countries; write letters (other than to "pen-pals"); play chess; help entertain friends or relatives in your home; decorate your room or help decorate your home.

69. Circle 1 code on each line to show about how many hours per month you did the activity on the average in your spare time during the past year; (categories: not done; 1 to 7 hours; 8 to 15 hours; 16 to 31 hours; 32 to 63 hours; 64 or more hours):

play major sports such as baseball, basketball, football or track; homework or study for school courses (outside of school); play games such as cards, checkers, dominoes, etc.; go dancing; go out on dates; talk with friends over the telephone; talk and joke with friends and acquaintances; have fun with your family (parents, brother or sister); just rest and relax or do nothing; read for fun or to pass the time away; listen to popular music on radio, phonograph or tape; listen to classical music on radio, phonograph or tape; watch TV.

70. Circle 1 code on each line to show about how many hours per month you did the activity on the average in your spare time during the past year; (categories: not done; 1 to 3 hours; 4 to 7 hours; 8 to 15 hours; 16 to 31 hours; 32 or more hours):

play baseball (hardball); play football; travel widely in the U.S.A. or in foreign countries; go swimming; play musical instruments; read interesting and worthwhile books; ride around in cars for fun rather than to get somewhere; go to meetings of clubs and organizations; go to parties, "pot lucks", socials, hayrides; attend church, Sunday school, or other religious activities; watch movies (other than on TV);

further than a half day's drive; a smaller city, town or village in the U. S. but further than a half day's drive; a smaller city, town or village within a half day's drive; a river, lake, or ocean within a half day's drive; a river, lake, or ocean in the U.S. but further than a half day's drive; open country, hills or mountains within a half day's drive; open country, hills or mountains in the U. S. but further than a half day's drive; national parks in the Far West (Rocky

Mountains, Pacific Coast, etc.); national parks elsewhere than in the Far West; Far West elsewhere than California or national parks; California; Florida; Canada; Mexico; Bermuda, West Indies (Caribbean Islands); Central America (other than Mexico) or South America; Europe; foreign country other than in the Americas or Europe; travel around to different parts of the world.

72. Circle 5 codes on the right side to show to which 5 of the above kinds of places you would like most to travel more often if nothing prevented you:

a large city within a half day's drive; a large city in the U.S. but further than a half day's drive; a smaller city, town or village within a half day's drive; a smaller city, town or village in the U.S. but further than a half day's drive; a river, lake or ocean within a half day's drive; a river, lake or ocean in the U.S. but further than a half day's drive; open country, hills or mountains within a half day's drive; open country, hills or mountains in the U.S. but further than a half day's drive; national parks in the Far West (Rocky Mountains, Pacific Coast, etc.); national parks elsewhere than in the Far West; Far West elsewhere than California or national parks; California; Florida; Canada; Mexico; Bermuda, West Indies (Caribbean Islands); Central America (other than Mexico or South America); Europe; foreign country other than in the Americas or Europe; travel around to different parts of the world.

73. Circle 1 code on the left side for each kind of volunteer community service you did without pay at any time during the past year:

collect money for a worthy cause; collect used clothing, old toys, newspapers, etc.; distribute literature and handbills; sell cookies or other things to raise money for an organization; typing, stuffing [illegible], serve as an assistant camp counselor; help teach others how to do or learn something; help with a children's group in a school, church or neighborhood center; entertain some people in an institution; act as host, hostess, or usher at some school, church or club function; assist in a local civic or citizen's organization working to improve the community.

74. Circle 3 codes on the right side to show which activities you would like to do more often if nothing prevented you:

collect money for a worthy cause; collect used clothing, old toys, newspapers, etc.; distribute literature and handbills; sell cookies or other things to raise money for an organization; typing, stuffing envelopes, sorting, filing, etc.; cleaning, painting, or repair work for a church or other organization; serve as a nurse's or hospital aide; help in a service men's canteen; help serve dinners at a church or club; serve as an assistant camp counselor; help teach others how to do or learn something; help with a children's group in a school, church or neighborhood center; entertain some people in an institution; act as host, hostess, or usher at some school, church or club function; assist in a local civic or citizen's organization working to improve the community.

75. Circle 10 codes to show which of the improvements listed in this booklet you think are most important or most needed in your community:

water sports: provide nearby water area for boating, water skiing, swimming, fishing, etc.; more or better public beaches; more or better places to rent sports equipment like boats, outboard motors, boat trailers, water skis, skin diving equipment and camping equipment; build more swimming pools; build more boat launching ramps and places to dock boats; community centers: build more community centers with game room, club rooms, snack bar, etc.; establish additional facilities in school buildings for use after school hours (such as lounge room, game room, snack bar, etc.); make school facilities more available after school hours (such as gym, class rooms, shop and home economics rooms); encourage churches to open and expand their facilities for leisure activities; trips: arrangements so that large groups of young people could go on hayrides, trips to the beach, trips to the mountains, etc.; arrangements so that groups of youth could travel to interesting places during the summer at low cost; more opportunities for young people to go camping for at least two weeks a year; social: more eating and

...g people can go on dates at low cost;
more community or school dances for young people; improve teen
clubs to make them more interesting; more eating places where
young people can gather in their spare time at low cost; more clubs
and activity groups for young people; more amateur athletic leagues;
indoor sports: bowling alleys which are less expensive; a more
conveniently located ice skating rink; more places to play pool
and billiards; outdoor sports: establish a drag strip for hot rods;
improve more land for use as athletic or ball fields; build more or

better tennis courts; develop more miniature golf courses; develop more golf courses; expand present parks or establish new parks with facilities for hiking, picnicking and sports; learning new skills or getting information about use of leisure: more opportunities for instruction in leisure activity skills (such as canoeing, golf, camping, dancing, drama, music, hobbies, etc.); more libraries or more complete collections of books in libraries; more free or low cost cultural events (lectures, concerts, plays, etc.); more full-time recreation workers trained to help youth make good use of their leisure; more youth clubs which help in the choice of a future career; recruit and train more volunteers to serve as advisers to youth clubs; more counselling to help youth make better choices in their use of leisure; miscellaneous: more opportunities for young people to do volunteer community service work; place greater emphasis upon arts and crafts in after-school programs; more organized recreation in which the whole family can participate; more TV programs for young people.

76. Circle the code for each activity which you think should be given free to young people with some community agency paying all of the costs:

bowling; indoor swimming; golf; dances; tennis; ice skating on a rink with artificial ice; club and group activities; swimming in a pool outdoors; instruction in dancing, music, hobbies, etc.; equipment and supplies for hobbies.

77. Circle 1 code on the left to show which one of the following comes closest to describing your father's (male guardian's) occupation. If he works at more than one job, circle the most important one:

salesman - such as life insurance, real estate, or industrial goods salesman; clerical worker - such as sales clerk, office clerk, store clerk, bookkeeper, ticket agent, etc.; manager - such as sales manager, store manager, office manager, business manager, factory supervisor, etc.; proprietor - such as the owner of a small business, wholesaler, retailer, contractor, restaurant owner, etc.; official or executive - such as manufacturer, officer in a large company, banker, government official or inspector, etc.; professional - such as clergyman, dentist, doctor, engineer, lawyer, professor, scientist, teacher, etc.; semiprofessional - such as accountant, actor, airplane pilot, armed forces officer, artist, draftsman, dental technician, engineering aide, librarian, hospital attendant, medical technician, musician, writer, etc.; service or protective - such as armed forces enlisted man or non-commissioned officer, barber, beautician, bus driver, fireman, policeman, waiter, etc.; skilled worker or foreman - such as baker, carpenter, electrician, mechanic, plumber, plasterer, tailor, or a foreman in a factory, farm, or mine, etc.; semi-skilled worker - such as apprentice, factory machine operator, chauffeur, delivery man, truck driver, etc.; workman or laborer - such as construction, factory, or mine worker, elevator operator, fisherman, longshoreman, etc.; farm or ranch owner, or manager; farm or ranch laborer; I do not have a father or male guardian.

78. Circle 1 code on the right to show what you yourself would like to be doing by the time you are 30 years old. If you are a girl and do not expect to be doing paid work answer in terms of what you would like your husband to be doing:

salesman - such as life insurance, real estate, or industrial goods salesman; clerical worker - such as sales clerk, office clerk, bookkeeper, ticket agent, etc.; manager - such as sales manager, store manager, office manager, business manager, factory supervisor, etc.; proprietor - such as the owner of a small business, wholesaler, retailer, contractor, restaurant owner, etc.; official or executive - such as manufacturer, officer in a large company, banker, government official or inspector, etc.; professional - such as clergyman, dentist, doctor, engineer, lawyer, professor, scientist, teacher, etc.; semi-professional - such as accountant, actor, airplane pilot, armed forces officer, artist, draftsman, dental technician, engineering aide, librarian, hospital attendant, medical technician, musician, writer, etc.; service or protective - such as armed forces enlisted man or non-commissioned officer, barber, beautician, bus driver, fireman, policeman, waiter, etc.; skilled worker or foreman - such as baker, carpenter, electrician, mechanic, plumber, plasterer, tailor, or a foreman in a factory, farm, or mine, etc.; semi-skilled worker - such as apprentice, factory machine operator, chauffeur, delivery man, truck driver, etc.; workman or laborer - such as construction, factory, or mine worker, elevator operator, fisherman, longshoreman, etc.; farm or ranch owner, or manager; farm or ranch laborer; I do not have a father or male guardian.

APPENDIX B

Population Density per "Available" Acre of Census Tracts in Prince Georges and Montgomery Counties, Maryland; Fairfax County and Falls Church, Virginia; and Washington, D. C.

Density Region I: Washington, D. C.

Density Area	Census Tract	Population Density per Acre
21	21	81.41
21	22	94.71
21	23	123.09
21	24	93.06
21	25	79.58
21	27	103.38
21	28	156.41
21	29	139.37
21	30	168.20
21	31	129.64
21	32	122.86
21	33	142.45
21	34	142.80
21	35	95.89
21	36	178.50
21	37	139.55
21	38	137.75
21	39	145.37
21	40	130.26
21	42	245.00
21	43	238.29
21	44	178.46
21	45	169.63
21	46	209.99
21	47	235.62
21	48	229.90
21	49	242.64
21	50	267.73
21	51	156.95
21	52	230.81
21	53	215.85
21	54	142.19

Density Region I: Washington, D. C. (continued)

Density Area	Census Tract	Population Density per Acre
21	55	120.28
21	59	92.93
21	61	104.08
21	63	161.57
21	64	91.14
21	65	167.11
21	66	162.16
21	67	129.11
21	69	129.30
21	70	134.92
21	71	106.11
21	72	107.50
21	80	174.43
21	81	177.83
21	82	99.60
21	83	172.36
21	84	173.42
21	85	165.62
21	86	194.54
21	87	130.42
21	88	80.85
21	92	104.98
21	96	180.00
22	2	71.04

Density Region II: Washington, D. C.

Density Area	Census Tract	Population Density per Acre
23	1	34.20
23	3	36.64
23	4	10.20
23	5	52.75
23	6	25.50

Density Region II: Washington, D. C. (continued)

Density Area	Census Tract	Population Density per Acre
23	7	61.23
23	10	30.83
23	11	-
23	12	32.08
23	14	25.75
23	41	34.27
23	56	64.30
23	57	65.13
23	58	46.77
24	60	56.50
25	16	11.05
25	17	29.77
25	18	29.85
25	19	37.38
25	20	26.50
26	68	48.42
26	78	30.19
26	79	40.57
26	89	34.03
26	90	12.48
26	91	30.45
26	93	41.15
26	94	25.60
26	95	31.06
27	73	33.18
27	74	33.00
27	75	26.71
27	76	32.82

Density Region III: Washington, D. C.

28	8	9.02
28	9	9.01
28	62	9.59
20	77	2.48
29	13	7.97
29	15	6.25
29	26	6.79

Density Region II: Alexandria, Va.

Density Area	Census Tract	Population Density per Acre
12	9	11.81
12	10	23.93
12	11	21.92
12	12	26.00
12	13	19.10
12	14	22.68
12	15	16.39
12	16	35.00
12	18	65.71
12	19	66.35
12	20	52.84
13	5	58.97
14	17	5.15

Density Region III: Alexandria, Va.

11	1	2.29
11	2	2.96
11	3	3.33
11	4	.67
11	6	8.24
11	7	6.86
11	8	9.57

Density Region II: Arlington, Va.

91	1	15.08
91	2	11.55
91	5	10.49
91	6	19.31
91	7	17.41
91	8	22.47
91	9	17.97
91	10	22.25
91	11	13.40
91	12	13.40
91	13	15.77

Density Region II: Arlington, Va.
(continued)

Density Area	Census Tract	Population Density per Acre
91	14	26.13
91	15	16.60
91	16	23.17
91	17	55.35
91	18	26.61
91	19	14.28
91	20	38.72
91	21	12.29
91	22	24.67
91	23	15.62
91	24	22.39
91	25	22.14
91	26	20.00
91	27	26.01
91	28	16.15
91	29	32.27
91	30	30.19
91	31	23.11
91	32	12.27
91	33	20.45
91	38	25.91
92	36	18.78

Density Region III: Arlington, Va.

Density Area	Census Tract	Population Density per Acre
93	3	6.51
93	4	4.07
93	34	9.17
93	35	6.14
93	37	9.04

Density Region II: Fairfax County, Va.

Density Area	Census Tract	Population Density per Acre
61	15	29.62
61	17	10.55
61	24	15.27
61	27	15.01

Density Region II: Falls Church, Va.

Density Area	Census Tract	Population Density per Acre
31	0	10.69

Density Region III: Fairfax County, Va.

Density Area	Census Tract	Population Density per Acre
62	1	8.35
62	2	6.07
62	3	5.99
62	4	6.40
62	5	2.40
62	6	1.31
62	7	2.82
62	8	.12
62	9	2.70
62	10	1.34
62	11	8.06
62	12	1.35
62	13	1.42
62	14	.25
62	16	6.74
62	18	4.91
62	19	3.19
62	20	.31
62	21	3.96
62	22	.42
62	23	8.27
62	25	1.58
62	26	3.77
62	28	5.94
62	29	6.25
62	30	.27
62	31	2.72
62	32	1.37
62	33	3.40
62	34	.77
62	35	4.77
62	36	.51
62	37	4.11

Density Region III: Fairfax County, Va.
(continued)

Density Area	Census Tract	Population Density per Acre
62	38	5.64
62	39	4.50
62	40	.94
62	41	.19
62	42	.15
62	43	.12
62	44	.11
62	45	.70

Density Region II: Montgomery County, Md.

41	9	-
41	10	-
41	11	-
42	34	10.42
42	37	16.73
43	43	12.50
45	29	11.83
45	30	10.08
45	31	10.90
45	40	11.80
45	17	28.88
45	18	13.43
45	19	34.48
45	20	23.91
45	22	13.82
45	23	24.37
45	24	14.58
45	25	22.95
45	26	28.33
44	46	10.89
44	47	11.28
44	48	33.56
46	53	12.97
46	56	14.16
47	12A	-

Density Region III: Montgomery County

Density Area	Census Tract	Population Density per Acre
48	1	-
48	2	-
48	3	-
48	4	-
48	5	-
48	6	-
48	7	-
48	8	-
48	12	-
48	13	.20
48	14	.27
48	15	.74
48	21	6,93
48	25	-
48	26	-
48	27	8.23
48	28	9.90
48	29	-
48	30	-
48	31	-
48	32	.44
48	33	4.09
48	34	-
48	35	6.87
48	36	9.27
48	38	4.91
48	39	9.50
48	41	3.08
48	42	9.42
48	44	3.04
48	45	5.80
48	49	4.69
48	50	9.12
48	51	5.57
48	52	9.04
48	54	9.13
48	55	6.06

Density Region III: Montgomery County, Md. (continued)

Density Area	Census Tract	Population Density per Acre
48	57	5.62
48	58	3.16
48	59	1.50
48	60	.19
48	12B	-
48	16	4.60

Density Region II: Prince Georges Co., Md.

Density Area	Census Tract	Population Density per Acre
71	69	12.44
72	37	13.11
73	42	14.10
74	39	11.35
74	45	20.51
74	46	23.39
74	47	31.00
74	48	31.96
74	49	15.25
74	50	10.79
74	51	19.15
74	52	13.22
74	53	15.07
74	54	17.83
74	55	18.59
74	56	43.60
74	57	13.83
74	58	12.53
75	15	16.93
75	16	24.87
76	23	14.48
77	25	12.19
77	26	14.35
77	27	15.97
77	29	11.52
77	30	13.37

Density Region II: Prince Georges Co., Md. (continued)

Density Area	Census Tract	Population Density per Acre
78	1	Laurel, Md.
74	60	25.09
74	61	24.07
74	62	14.16
74	63	10.60
74	64	12.38

Density Region III: Prince Georges Co.

Density Area	Census Tract	Population Density per Acre
79	2	-
79	3	-
79	4	.23
79	5	-
79	6	-
79	7	-
79	8	-
79	9	-
79	10	-
79	11	Andrews Air Base
79	12	-
79	13	-
79	14	-
79	17	1.12
79	18	8.82
79	19	1.55
79	20	9.06
79	21	1.72
79	22	-
79	24	3.08
79	28	.98
79	31	8.80
79	32	7.08
79	33	4.57
79	34	5.92

Density Region III: Prince Georges Co., Md.
(continued)

Density Area	Census Tract	Population Density per Acre
79	35	.22
79	36	1.10
79	38	5.70
79	40	9.79
79	41	4.05
79	43	4.47
79	44	8.01
79	59	3.56
79	65	5.34
79	66	7.32
79	67	1.20
79	68	3.24
79	70	4.56
79	71	6.36
79	72	4.55
79	73	.79
79	74	.43

NOTE: No data were available for a number of census tracts outside the jurisdiction of the Maryland National Capital Planning Commission. These were assigned to Density Region II or III on the basis of land use determined from area maps and other supplementary sources from the three planning agencies.

Percent Distribution of Activity-Interest Types in 71540 Students in the Washington Metropolitan Area and in 4162 Students in Flint, Michigan, by Grade and Socio-Economic Status (S.E. Status)

Type of Activity-Interest	Washington Metropolitan Area, 9-12th Grade Public School		Flint, Michigan 10-12th Grade Public School		Washington Metropolitan Area, 7-8th Grade Public School		One private Prep School	Catholic High Schools
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor with high S.E. status	22.97	15.00	20.88	12.34	10.49	15.42	32.25	18.82
Outdoor with low S.E. status	23.05	16.79	29.20	21.49	40.50	21.93	12.37	12.82
Intellectual with high S.E. status	2.98	15.67	1.23	12.43	1.08	7.87	8.06	11.35
Intellectual with low S.E. status	1.49	5.46	.84	6.33	.95	4.35	3.23	5.35
Passive with high S.E. status	14.78		13.49		10.80		16.67	
Passive with low S.E. status	8.66		10.98		11.48		8.06	
Altruistic with high S.E. status		2.45		2.25		2.00		5.63
Altruistic with low S.E. status		7.50		8.26		8.59		5.53
Dating with high S.E. status		6.01		4.65		3.32		8.39
Dating with low S.E. status		7.28		7.70		5.87		6.73
Indeterminate with high S.E. status	9.90	7.41	6.55	5.77	6.15	8.91	12.37	11.16
Indeterminate with low S.E. status	16.17	16.43	16.84	18.77	18.53	21.73	6.99	15.13
Total persons	29,623	31,770	2031	2131	2212	2503	186	1084

Percent Distribution of Activity-Interest Types in 15,733 High School Students: Washington, D. C., by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	High Density Region I				Medium Density Region II				Low Density Region III			
	Under 16 Years of Age		16 Years of Age and Over		Under 16 Years of Age		16 Years of Age and Over		Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor: high S.E. status	5.12	2.15	3.99	1.89	14.31	10.38	12.36	7.94	22.45	21.89	15.77	10.34
Outdoor: low S.E. status	50.74	22.26	41.34	16.62	37.25	21.80	29.12	15.46	22.45	18.25	24.75	10.55
Intellectual: high S.E. status	.30	1.83	1.07	2.49	1.84	8.36	3.45	12.45	4.08	16.54	5.58	21.31
Intellectual: low S.E. status	2.96	8.92	5.21	10.05	1.92	8.02	3.68	8.94	2.38	5.11	1.94	5.91
Passive: high S.E. status	1.77		2.40		8.79		9.13		15.99		12.38	
Passive: low S.E. status	10.54		10.12		10.39		10.31		9.52		7.77	
Altruistic: high S.E. status		.97		1.19		2.42		2.09		.97		3.59
Altruistic: low S.E. status		20.49		21.94		10.61		12.34		5.35		9.92
Dating: high S.E. status		1.33		1.44		4.79		4.93		4.87		9.28
Dating: low S.E. status		12.27		14.08		9.69		10.95		7.79		7.38
Indeterminate: high S.E. status	1.28	1.20	1.94	1.09	6.39	4.33	8.99	5.39	8.16	6.56	9.47	7.38
Indeterminate: low S.E. status	27.29	28.59	33.93	29.20	19.10	19.61	22.94	19.52	14.97	12.65	22.32	14.34
Total persons	1015	1581	1957	2010	1251	1734	2201	2393	294	411	412	474

Percent Distribution of Activity-Interest Types in 13159 High School Students:
Prince Georges County, Md., by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	Medium Density Region II				Low Density Region III			
	Under 16 Years of Age		16 Years of Age and Over		Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor: high S.E. status	19.3	13.3	19.6	11.5	18.6	12.7	19.16	9.77
Outdoor: low S.E. status	30.4	26.6	23.5	19.5	33.87	15.3	27.0	20.22
Intellectual: high S.E. status	2.0	9.8	3.1	12.0	.6	7.1	2.22	11.31
Intellectual: low S.E. status	.7	5.5	1.7	6.8	.8	3.6	1.09	4.77
Passive: high S.E. status	10.9		11.4		9.6		10.54	
Passive: low S.E. status	12.4		10.1		11.5		9.75	
Altruistic: high S.E. status		2.4		2.9		2.4		2.73
Altruistic: low S.E. status		6.7		6.9		7.4		9.27
Dating: high S.E. status		5.3		4.3		3.9		3.73
Dating: low S.E. status		7.9		7.1		8.2		8.31
Indeterminate: high S.E. status	6.0	6.6	10.5	8.1	7.2	7.2	8.84	7.68
Indeterminate: low S.E. status	18.2	16.0	20.0	21.0	18.8	22.3	21.42	22.23
Total persons	976	1145	1538	1467	1674	1861	2297	2201

Percent Distribution of Activity-Interest Types in 13739 High School Students: Montgomery County, Md., by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	Medium Density Region II				Low Density Region III			
	Under 16 Years of Age		16 Years of Age and Over		Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor: high S. E. status	28.51	23.56	29.15	20.28	31.42	27.66	32.44	20.67
Outdoor: low S. E. status	16.92	18.82	13.75	14.10	14.94	14.13	13.38	9.89
Intellectual: high S. E. status	3.72	16.74	4.32	22.23	2.86	19.88	5.12	25.44
Intellectual: low S. E. status	.93	3.59	.85	3.56	.23	3.05	.44	3.35
Passive: high S. E. status	20.05		20.20		21.52		18.71	
Passive: low S. E. status	8.71		6.57		6.30		4.63	
Altruistic: high S. E. status		2.94		3.42		2.69		3.15
Altruistic: low S. E. status		3.30		2.89		2.69		4.13
Dating: high S. E. status		6.75		6.72		6.30		6.64
Dating: low S. E. status		3.81		4.84		3.71		3.94
Indeterminate: high S. E. status	10.83	8.94	14.12	9.94	12.59	9.46	14.21	10.73
Indeterminate: low S. E. status	10.82	11.49	11.02	12.02	10.13	10.42	11.06	12.06
Total persons	1182	1392	1643	1489	1747	1967	2287	2032

Percent Distribution of Activity-Interest Types in 18762 High School Students: Arlington, Alexandria, Falls Church and Fairfax County, Virginia by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	Medium Density Region II				Low Density Region III			
	Under 16 Years of Age		16 Years of Age and Over		Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor: high S. E. status	23.88	21.22	28.54	14.15	31.58	23.95	32.30	16.91
Outdoor: low S. E. status	18.50	15.50	14.57	11.28	15.65	14.96	14.00	13.40
Intellectual: high S. E. status	2.28	19.00	4.23	26.00	2.14	18.88	4.26	24.34
Intellectual: low S. F. status	.81	4.96	1.50	5.88	.51	3.11	.87	3.93
Passive: high S. E. status	22.11		18.12		21.60		19.75	
Passive: low S. E. status	11.05		6.96		7.71		7.36	
Altruistic: high S. E. status		2.35		2.29		2.77		2.64
Altruistic: low S. E. status		3.62		3.97		2.23		3.75
Dating: high S. E. status		7.50		8.75		8.69		10.04
Dating: low S. E. status		4.64		6.17		4.54		6.39
Indeterminate: high S. E. status	10.10	9.34	12.43	8.84	12.45	11.11	12.02	7.64
Indeterminate: low S. E. status	11.27	11.88	13.65	12.67	8.36	9.77	9.44	10.97
Total persons	1357	1574	2197	2092	2153	2601	3452	3336

Percent Distribution of Activity-Interest Types in 4161 Tenth thru Twelth Graders: Flint, Michigan, by Age, and Socio-Economic Status

Activity-Interest Types	Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls
Outdoor: high S.E. status	17.22	11.69	21.51	12.50
Outdoor: low S.E. status	38.41	26.73	27.59	20.21
Intellectual: high S.E. status	.66	9.31	1.33	13.20
Intellectual: low S.E. status	.33	6.21	.93	6.37
Passive: high S.E. status	11.92		13.77	
Passive: low S.E. status	16.23		10.06	
Altruistic: high S.E. status		2.15		2.28
Altruistic: low S.E. status		8.11		8.29
Dating: high S.E. status		4.06		4.79
Dating: low S.E. status		5.49		8.24
Indeterminate: high S.E. status	3.64	4.77	7.06	6.02
Indeterminate: low S.E. status	11.59	21.48	17.76	18.11
Total persons	302	419	1729	1712

APPENDIX E

Indices of Relative Frequencies of Activity-Interest Types of Students in Washington, D. C. by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	High Density Region I				Medium Density Region II				Low Density Region III			
	Under 16 Years of Age		16 Years of Age & Over		Under 16 Years of Age		16 Years of Age & Over		Under 16 Years of Age		16 Years of Age & Over	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor: high S.E. status	.51	.32	.40	.28	1.43	1.54	1.24	1.18	2.25	3.24	1.58	1.53
Outdoor: low S.E. status	1.39	1.23	1.13	.92	1.02	1.20	.80	.85	.62	1.01	.68	.58
Intellectual: high S.E. status	.13	.22	.48	.31	.83	1.04	1.55	1.55	1.84	2.06	2.51	2.65
Intellectual: low S.E. status	.83	1.03	1.48	1.16	.54	.93	1.04	1.03	.67	.59	.55	.68
Passive: high S.E. status	.27		.36		1.32		1.37		2.40		1.86	
Passive: low S.E. status	1.04		1.00		1.03		1.02		.94		.77	
Altruistic: high S.E. status		.54		.67		1.37		1.18		.55		2.03
Altruistic: low S.E. status		1.34		1.44		.69		.81		.35		.65
Dating: high S.E. status		.36		.39		1.31		1.35		1.33		2.53
Dating: low S.E. status		1.08		1.24		.86		.97		.69		.65
Indeterminate: high S.E. status	.23	.33	.35	.30	1.16	1.21	1.63	1.50	1.48	1.84	1.72	2.07
Indeterminate: low S.E. status	1.06	1.25	1.33	1.28	.75	.86	.90	.85	.59	.55	.87	.63

Indices of Relative Frequencies of Activity-Interest Types of Students in Prince Georges County, Md. by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	Medium Density Region II				Low Density Region III			
	Under 16 Years of Age		16 Years of Age and Over		Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor: high S.E. status	1.00	1.15	1.02	.99	.97	1.10	1.00	.85
Outdoor: low S.E. status	1.07	1.18	.83	.86	1.19	1.12	.95	.90
Intellectual: high S.E. status	1.00	.98	1.56	1.20	.31	.71	1.13	1.13
Intellectual: low S.E. status	.75	1.06	1.76	1.32	.87	.70	1.13	.92
Passive: high S.E. status	1.03		1.08		.91		.99	
Passive: low S.E. status	1.16		.94		1.07		.91	
Altruistic: high S.E. status		.91		1.10		.93		1.05
Altruistic: low S.E. status		.86		.88		.95		1.19
Dating: high S.E. status		1.28		1.03		.93		.90
Dating: low S.E. status		.99		.90		1.03		1.05
Indeterminate: high S.E. status	.72	.88	1.25	1.09	.84	.96	1.19	1.03
Indeterminate: low S.E. status	.92	.76	1.02	1.01	.93	1.07	1.09	1.07

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Indices of Relative Frequencies of Activity-Interest Types of Students in Arlington, Alexandria, Falls Church and Fairfax County, Virginia by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	Medium Density Region II				Low Density Region III			
	Under 16 Years of Age		16 Years of Age and Over		Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Outdoor: high S. E. status	.80	1.12	.95	.75	1.05	1.27	1.08	.89
Outdoor: low S. E. status	1.22	1.13	.96	.82	1.03	1.09	.92	.98
Intellectual: high S. E. status	.66	.85	1.22	1.16	.62	.84	1.23	1.09
Intellectual: low S. E. status	.87	1.15	1.61	1.37	.55	.72	.94	.91
Passive: high S. E. status	1.10		.90		1.07		.98	
Passive: low S. E. status	1.40		.88		.98		.93	
Altruistic: high S. E. status		.92		.90		1.09		1.04
Altruistic: low S. E. status		1.08		1.18		.66		1.12
Dating: high S. E. status		.84		.97		.97		1.12
Dating: low S. E. status		.84		1.11		.82		1.15
Indeterminate: high S. E. status	.85	1.02	1.04	.97	1.04	1.22	1.01	.84
Indeterminate: low S. E. status	1.08	1.06	1.30	1.14	.80	.88	.90	.90

Indices of Relative Frequencies of Activity-Interest Types of Youth in Flint, Michigan by Density Region, Age, and Socio-Economic Status

Activity-Interest Types	Under 16 Years of Age		16 Years of Age and Over	
	Boys	Girls	Boys	Girls
Outdoor: high S. E. status	.82	.95	1.03	1.01
Outdoor: low S. E. status	1.31	1.24	.94	.94
Intellectual: high S. E. status	.54	.74	1.08	1.06
Intellectual: low S. E. status	.39	.98	1.11	1.01
Passive: high S. E. status	.88		1.02	
Passive: low S. E. status	1.45		.92	
Altruistic: high S. E. status		.96		1.01
Altruistic: low S. E. status		.98		1.00
Dating: high S. E. status		.87		1.03
Dating: low S. E. status		.71		1.07
Indeterminate: high S. E. status	.56	.83	1.08	1.04
Indeterminate: low S. E. status	.69	1.14	1.05	.96

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